Exploring the Dynamics of Transformative Learning, Social Action, and Web 2.0: The Case of Egyptian Student Activists

Dalia Radwan

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By: Dalia Radwan

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Signed by the final examining committee:

Dr. Robert Bernard_____ Chair

Prof. Arpi Hamalian_____ Examiner

Dr. Steven Shaw_____ Examiner

Dr. Ann-Louise Davidson_____ Supervisor

Approved by _____

Chair of Department or Graduate Program Director

_____

Dean of Faculty

Date _____

ABSTRACT

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Dalia Radwan

The main objective of this study is to explore the nature of learning and the experiences of students involved in civic collective action, particularly during the 2011 Egyptian Revolution, and the role of Web 2.0 in the learning and collective action process. This study examines qualitative, in-depth interviews of five student activists in Egypt, and provides an interpretive analysis within and between participants. The study probes the participants' conceptions of learning as they struggled against oppression, co-constructed new ways of understanding the world, and took collective actions to make political changes and achieve specific goals. Drawing on previous research and a broad spectrum of recent empirical developments, the study finds that the involvement in emancipatory struggle and social action, facilitated by Web 2.0 technologies, resulted in a transformational learning experience. That experience led to the acquisition of new knowledge and the development of new skills, which greatly enabled formerly voiceless students to break away from teacher-centered models of learning in Egypt, take control of their own learning, and consequently become autonomous thinkers ready for participation in a democratic society. Given the small sample size, the findings are limited to this study and are not suitable for statistical generalization, but the results are contextually transferrable to students in similar contexts in middle-eastern countries where teaching is still traditional and does not encourage critical thought. To apply the findings of this study more broadly, future research should explore similar instances in other countries, languages and cultural contexts.

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Dedication

To my father and my brother, you are forever in my heart, and I miss you every day.

To my mother who fills my world with unconditional love that knows no boundaries or religions.

And to the brave who taught me how to rise after a fall.

Table of Contents

Chapter One: Introduction 1
Emergence of the Situation 1
Transformative Learning 4
Transformational Tools 5
Active vs. Passive Voice 5
The Egyptian Context 7
Egyptian Activists' Use of Web 2.0 Applications 10
Purpose of the Study and Research Questions 13
Significance of the Study 14
Chapter Two: Literature Review 16
Transformative Learning 16
How Transformative Learning Takes Place 20
Central Concepts of Perspective Transformation 21
Benefits of and Barriers to Transformative Learning 25
Freire's Conceptions of Transformative Learning: A Link between Reflection and Action 27
Transformative Learning in Social Action 28
Transformation and Web 2.0 30
Summary 39
Chapter Three: Methodology 41
Research Questions 41
Methodological Approach 42
Procedure for the Data Collection 43
Data Analysis 46
Qualitative Rigour 48
The Researcher's Role, Assumptions, and Biases 49
Limitations of the Study 51
Chapter Four: Findings 52
Part One: The Interviews 52
Part Two: A Synthesized Interpretive Analysis of the Findings 82

Summary of Findings 123
Chapter Five: Conclusion 125
Implications for Educational Practice 125
Suggestions for Future Research 128
Limitations of the Study 130
References 132
Appendix A 148
Appendix B 151
Appendix C 156

List of Figures

Figure 1. Theme Five – Learning in Social Action……. 111

Figure 2. Theme Six – The Perceived Role of the Activist……. 120

List of Tables

Table 1. Participants' Demographics ……. 44

Table 2. Theme One - Codes and Representative Quotes ……. 155

Table 3. Theme Two - Codes and Representative Quotes ……. 155

Table 4. Theme Three - Codes and Representative Quotes ……...…...……. 156

Table 5. Theme Three Categories ……..……. 158

Table 6. Theme Four - Codes and Representative Quotes ……. 158

Table 7. Theme Five - Codes and Representative Quotes ……. 161

Table 8. Theme Six - Codes and Representative Quotes ……...…...……. 164

Chapter One: Introduction

The purpose of this chapter is to introduce the proposed study, present its research questions, and explain why its pursuit is relevant within the realm of educational technology. The study draws on previous research and a spectrum of recent empirical developments to help understand the pre-conditions for social movements, the complexity of unlearning dominant, oppressive ideologies, and the transformational opportunities of reflection, discourse, and freedom of expression enabled by the use of information and communication technologies in the information age.

Emergence of the Situation

The last decade of the 20th century witnessed significant social, political, and economic change. This period was characterized by a shift from the traditional industrial-driven economy to a knowledge-driven economy (Reinhardt et al., 2011; Duderstadt, 2002). The main factor in development and economic growth has become the ability to produce and use knowledge (World Bank, 2009). New work patterns and new business methods and objectives have developed, and require new, uniquely skilled workers (Reinhardt et al., 2011). In a knowledge-driven economy workers engage in knowledge-intensive tasks characterized by the processing of non-routine problems that depend upon non-linear and creative thinking (Reinhardt et al., 2011).

The age of knowledge presents both challenges and opportunities to the global education system. Developed societies position the university, “as an engine for economic growth” (Duderstadt, 2002). Politicians, business leaders, and educational organizations have all been calling for new education policies that transform the traditional roles and nature of higher education (Biggs & Tang, 2011). The predominant roles of the university are expected to shift

from traditional academic scholarship to the fostering of traits like innovation, creativity, and entrepreneurship (Duderstadt, 2002).

Universities are now expected to prepare students with competencies that can meet the demands of knowledge-based work (Biggs & Tang, 2011). Often referred to as twenty-first century skills, these competencies include innovation, communication, collaboration, problem solving, creativity, information management, team work, project management, lifelong learning, and autonomous thinking (Conference Board of Canada, 2014). These competencies are vital for full participation in a democratic society as well as for moral decision-making (Mezirow, 1997, p. 7).

Numerous scholars have written about the distinction between traditional teacher-centered pedagogy and a more progressive student-centered pedagogy. Teacher-centered pedagogy typically involves an active teacher and a passive student (Mascolo, 2009). This traditional approach uses lectures as the primary means of classroom communication, depends on individual, intentionally planned educational activities, and judges students based on individual tasks and tests (Resnick, 1987). Students compete for grades rather than collaborate in the learning process (Sudbury & Okazawa-Rey, 2009). By contrast, learner-centered pedagogy is based on the idea of an active student as the primary architect of her own learning, with a teacher or facilitator who provides neutral feedback, encourages, and helps students establish their own rules (Mascolo, 2009). Trigwell and Prosser (1999, 2005, 2006) conducted a set of phenomenographic studies to address the question of how variation in university teachers' approach to teaching relates to variation in their students' approach to learning. The findings of their studies suggest that when teachers focus on what they do and on transmitting information students adopt surface approaches to learning, whereas when teachers focus on student learning

needs and on changing their own conceptions (e.g. approach to teaching and perception of the situation), students adopt deep approaches to learning.

Some scholars assert that learning is a social activity that cannot be separated from its context (Brown, Collins & Duguid, 1989), and "knowing about,"—a term used by most situated cognition theorists (Lave & Wenger, 1991), is not an integral, self-sufficient substance; it is instead an action that is co-produced through situations and activity (Brown, Collins & Duguid, 1989; Barab & Duffy, 2000). Accordingly, more learning may occur when learners are actively involved in the process of meaning and knowledge construction rather than passively receiving information. In this context knowledge is also not produced by individuals working separately; it is the outcome of groups collaborating to achieve a specific goal.

The information age demands a major shift in educational methods away from passive classroom lecture courses, packaged into well-defined degree programs, and toward interactive, collaborative learning experiences that better meet the changing needs of both employer and employee (Duderstadt, 2002). High connectivity and ubiquitous, demand-driven learning necessitate an expansion of the traditional vision of pedagogy so that learners are active participants or co-producers of knowledge rather than passive consumers of content; learning must become a participatory, social process supporting personal life goals and needs (Mcloughlin & Lee, 2007).

A formal education that prepares students to become autonomous, reflective thinkers is a desirable outcome for the knowledge-based economy. Higher education in many countries, however, is faced with great challenges related to, "underfunding, accountability, alliance of programs with corporate interests, employability of graduates, use of and equitable access to technologies, and skills-based training relevant to the knowledge society" (UNESCO, 1998;

Atbach, Reisberg & Rumbley, 2009; Duderstadt, 2002; Roksa & Arum, 2011). Traditional higher education institutions now need to redefine the purpose and goals of instruction from a new perspective rooted in the relationship between society, the needs of employers, and the academic world (Tynjälä, Välimaa & Sarja, 2003; Gosselin at al., 2013). At the same time, educators are expected to prepare new generations, "as reflective thinkers and lifelong learners" to ensure that their transition to the workplace is successful (Fischer & Konomi, 2005; Berdrow and Evers, 2011). Fortunately, for this latest, connected generation, learning is not restricted to the classroom and to formal institutional classrooms (Foley, 1999). Other dimensions of learning exist, notably what Mezirow (1991) described as "transformative learning."

Transformative Learning

Transformative learning is a long process through which adults critically reformulate reified structures of meaning in light of new experiences, fostering the development of autonomous thinking (Mezirow, 1997; 2000). This process causes change in taken-for-granted frames of reference, perspectives, habits of mind, and mind-sets (Mezirow, 1991; 1997; 2000). Transformative learning begins with a "disorienting dilemma" (Mezirow, 2000, p.22), examples include; prolonged youth unemployment associated with social exclusion, delayed marriage, and loss of personal autonomy. The dilemma causes people go through different stages of questioning, critical reflection, reevaluating assumptions about the world, realizing that "others have engaged in this process" (p. 22), testing new perspectives and roles, planning a course of action, and participating in "reflective discourse" (p. 22). Through this process, people co-construct knowledge and skills in order to instigate their plan. Mobilization, social action and public protests are examples of a collective plan of action. Finally, people reintegrate new perspectives into their lives (Mezirow, 2000).

Transformational Tools

A great many researchers have noted that the emergence of Web 2.0 at the turn of 21st century is opening doors for transformational learning. "Web 2.0" describes Internet platforms that allow content generation and interactive participation by users (Kaplan & Haenlein, 2010). Some researchers have hailed Web 2.0 technologies as empowering tools for anyone who wants to learn (Collis & Moonen, 2008; Conole & Alevizou, 2010; Biasutti & Deghaidy, 2012; Bennett et al., 2012). For the first time, self-directed learners outside of learning institutions have access to powerful online knowledge and social communities of experts and peers (Klamma et al., 2007). Web 2.0 tools, including social networking sites, blogs, Wikis, and media sharing applications are powerful platforms capable of supporting and encouraging collaborative content generation, knowledge sharing, and the harnessing of collective intelligence (O'Reilly, 2005). Web 2.0 tools are also characterized by flexibility and modularity that enables "collaborative remixability – a transformative process in which the information and media organized and shared by individuals can be recombined and built on to create new forms, concepts, ideas, mashups, and services" (McLoughlin & Lee, 2007). New, emerging empirical studies shows the huge potential effect of Web 2.0 use on the promotion of personal agency and autonomy (McLoughlin & Lee, 2010).

Active vs. Passive Voice

There is indeed a huge contrast between a passive role, in which students approach learning in a traditional classroom lecture setting, and an active role, where students are personally involved in protests and social action. Collective action is defined by specific actions taken by a relatively unstructured, disadvantaged group in the face of inequality, with the aim of improving the condition of the group as a whole (Wright, Taylor & Moghaddam, 1990). These

actions are often risky; intimidation and force might be used by political institutions to maintain social order and stability (Castells, 2012). Communicative action, such as sharing emotions (i.e. fear and anger) and identifying with others induces collective action (Castells, 2012). Students who engage in such actions, often classified as student activists, hope to induce governmental bodies into making specific social, political, or educational changes. Social actions may include protests, strikes, boycotts, campaigning, or demonstrations. Activism can take many forms, including social movements, which normally consist of a large group engaged in organized behavior to challenge certain policies. Tarrow (1996) defines social movements as, "sustained challenges to power holders in the name of a disadvantaged population living under the jurisdiction or influence of those power holders" (p. 874).

The Québec Student Movement, known as Le Printemps Érable, is an example of student social movements. In February 2012, the Québec Student Movement erupted, opposing the Liberal government's planned tuition hike. As Palacios et al. (2013) describe; over the course of a few weeks, 175,000 students joined the unlimited general strike, representing over half of Québec's 342,000 post-secondary students, and by the end of June the student strike had become the longest in Québec's history and showed no signs of retreat until the proposed tuition hike was retracted (p. 8). A participant in the Québec Student Movement observed that allying with a diverse group of workers, community-based activists, undergraduate and graduate students, and professors provided a rich opportunity for critical exchange, learning, and cultural cross-pollination, as well as an opportunity to raise awareness of pervasive race-, class-, and gender-based oppression and to mobilize against its further entrenchment (Palacios et al, 2013). Since most social movements consist of heterogeneous groups of people, participants may have varying perceptions of what the movement's desired outcomes are—the same action may be

judged as successful by some participants and as failed by others (Giugni, 1998). While a number of case studies show that the most powerful learning occurs as people struggle against oppression or injustice, make sense of what is happening to them, create new ways of understanding the world, and work out ways of doing something about it (Foley, 1999), the political and cultural outcomes and consequences of social movements are usually indirect, unintended, and sometimes in contradiction to their stated aims (Giugni, 1998).

Recent protest and social movements, particularly in the Arab world, have increasingly been shaped by the use of social media applications as platforms of mass mobilization. The latest Arab uprising, which has attracted both media and academic attention, was led by a young, educated generation, and facilitated by Web 2.0 tools. This presents an interesting model of a new form of struggle against oppression and injustice in the digital age. With that in mind, the focus of this study is the 2011 Egyptian Revolution, and on Egypt as an example of emancipatory social struggle by a dynamic, young, and connected generation. The following section briefly presents the context and background that frames the 2011 Egyptian Revolution.

The Egyptian Context

In Egypt there is an estimated 12.6% unemployment rate (SIS, 2011). The cohort of young men and women in the 19-28 age group comprise about 77.5% of Egypt's total unemployed labor force, of which 85.4% are university graduates (SIS, 2012). According to the Human Development Report, Egypt's achievements in improving general access and years of educational attainment are impressive, but have not translated into better employment opportunities (UNDP, 2010). Factors associated with the current unemployment trend include a notable decline in the quality of higher education over the last three decades as Egypt's teachers, students, and parents cling to traditional teaching and learning styles involving rote

memorization (Megahed, Ginsburg, Abdellah, & Zohry, 2008). Research results indicate a mismatch between the graduate outcomes of educational institutions at all levels and the demands of the labor market (El Baradei & El Baradei, 2004; UNDP, 2010; World Bank, 2007; Angel-Urdinola & Semlali, 2010).

A diverse range of drivers of change brought Egypt civil unrest, which began Tuesday, January 25, 2011. These drivers included "demographics, economy, technology, foreign policy, legitimacy of the state, torture, and corruption" (Green, 2011). On the socio-economic side, "a rampant unemployment rate" (Parks, 2011) was a major factor leading to, "the graduate with no future" (Mason, 2011) in a country where roughly, "two-thirds of its population is under 30, and each year 700,000 new graduates chase 200,000 new jobs" (Green, 2011). On the political side, the 30+ year tyrannical rule of Hosni Mubarak, a state of emergency law, lack of free elections and freedom of speech, and the spread of police brutality were all factors that played an important part in driving discontented Egyptians into the streets (Wahba, 2011; Green, 2011).

Young Egyptians faced a grim future with very limited job opportunities; this key contributing factor had been brewing for over a decade. Further, several cases of torture conducted by Egypt's secret police came to light and shocked Egyptian society, and the younger generation in particular. The infamous case of Khaled Said, a young man from Alexandria allegedly dragged out of an internet café and beaten to death by two security officials, galvanized public opinion (Elbendary, 2011). The disturbing image of Khaled's broken face was posted on Facebook and sparked widespread outrage amongst Egypt's youth (Logan, 2011). A Facebook page named *We are all Khaled Said* was created and soon had a virtual following in the thousands (Elbendary, 2011). Nearly, 90,000 people responded to a request on the *We are all Khaled Said* Facebook page to demonstrate on January 25, and were accompanied by thousands

of other men and women from different districts who responded to appeals by the young activists (Lesch, 2011). The government responded to the first protests by blocking twitter and then Facebook two days later (Parks, 2011). Blocking social media networks not only enraged Egyptian citizens, but also brought increased national attention to the protestors (Parks, 2011).

Many young Egyptians, especially young men, identified with Khaled Said and saw that his fate could easily be theirs. Wael Ghonim, an accidental activist and allegedly a key organizer of the protests, stated, "Today they killed Khaled. If I don't act for his sake, tomorrow they will kill me" (as cited in Vargas, 2012). The intense and tangible sense of injustice, lack of personal safety, and the right to life, liberty and the pursuit of happiness are crucial to understanding why young people acted the way they did (Elbendary, 2011). Growing concern about, and direct experience of police brutality by young people from all walks of life, and their willingness to risk speaking out were crucial in preparing the ground for the January 25 Revolution (Lesch, 2011). The *We are all Khaled Said* Facebook page helped ignite an uprising (Elbendary, 2011; Logan, 2011) that led to the resignation of President Mubarak on February 11, 2011, and the dissolution of the ruling National Democratic Party (Vargas, 2012).

Many contemporary studies suggest that the emerging force of Arab youth is directly related to the development of communication technologies in the Middle East (Allagui & Kuebler, 2011). Networks of wired activists are using Web 2.0 tools to develop public awareness, propel real-life protests, and use social media as a tool for social change (McCaughey & Ayres, 2003). While contemporary empirical studies suggest that the use of Web 2.0 platforms marked a turning point in the 21st century coordination and mobilization of grassroots movements (Herrera, 2012; Faris, 2013; Perez, 2013), some skeptics, including Evgeny Morozov and Malcolm Gladwell, argue that Web 2.0 platforms create only loose and leaderless networks,

chronically prone to conflict and error, and may lead to oppression rather than emancipation (Joseph, 2011).

Egyptian Activists' Use of Web 2.0 Applications

Many media reports and testimonies by activists, bloggers, and journalists suggest strongly that Egyptians are not free to speak out. Journalist Magedi Hussien, editor-in-chief of the censured Egyptian Al Shaab Newspaper stated that, before the revolution, genuine media freedom was only possible online ("Testimonies," 2011). This led many activists to look for new means of expression including blogs, forums, independent news pages, and the official web pages of political groups. Alaa Abdel Fattah, an Egyptian blogger, software developer, and political activist, stated that these venues were also used to actively organize different protests in Egypt (as cited in Glaser, 2006). Similarly, one of the most popular Egyptian activists and bloggers @Sandmonkey, or Mohamed Salam, explained that, "Facebook is a fantastic way to share information, post links or organize events; if you use Facebook to do that, you can use it also to organize a demonstration" (as cited in Rodriguez, 2012).

Castells (2012) argues that digital social networks create the conditions for a form of shared practice that allows a leaderless movement to survive, coordinate, and expand. By the same token, Egyptian blogger Salma El Daly explained how she used social media to maintain communication among people within the movement and with society at large to help the revolution endure; "Twitter and Facebook are the ways we keep the momentum going. We campaign there" (as cited in Rodriguez, 2012).

Young Egyptian activists used Web 2.0 applications for opposition, networking, recruiting, mobilization, planning collective action, and raising awareness amongst the public. Blogger and activist Mohamed El Dahshan explained how Web 2.0 applications expanded the

space afforded the activists and played a large role in affirming their autonomy vis-à-vis the Egyptian authorities:

> On May 23rd, more than 370 bloggers defied a journalistic ban on broaching the subject of the army and heeded a call to write a post evaluating the performance of the SCAF as the ruler of the country, with the aim of providing constructive criticism. They criticized military trials for civilians, the emergency law, and the ruling junta's failure to prosecute members of the old regime. On Twitter, the #NoSCAF hashtag was assuredly the most widely used all day, and served both as a repository for vocal objections and an increasingly loud call for action. Meanwhile, an anonymous open letter titled "Dear SCAF, you are the counterrevolution" has been making the rounds online, accusing the army of originally supporting Mubarak's forces and facilitating the work of his police and thugs during the revolution — and afterward (El Dahshan, 2011).

Twitter was also used by Egyptian activists as a tool to contest information disseminated and controlled by authorities during the revolution. Several 2011 tweets reveal some individual stories occurring during the Egyptian revolution, including small acts of humanity:

> ""#Egypt is amazing, the pharmacist just gave us a discount, because the supplies are going to the injured in #tahrir. #egysolidarity," tweeted @Egyptocracy. She had done this kind of thing before – in January her cornea was ulcerated during the uprising. Now she was back in the middle of it, as half an hour later she tweeted: "I just got teargassed. Fuck. Fuck. Fuck." Five minutes later, at 12.50am: "We got out. I am dizzy and nauseous." But by 1am the vital supplies are delivered: "Thank you everyone. We are safe. Made it to the hospital. This is not pretty. #tahrir"" (Nunns, 2001).

Many activists used their blogs to disseminate personal observations, circulate information, raise public awareness, and plan for social action and collaboration. For example, on the second day of the revolution, January 26, 2011, blogger and activist Tarek Shalaby wrote a blog post outlining different ways in which Egyptian Internet users could bypass the censorship imposed by Egyptian authorities on social media applications and many websites. On May 2, 2011, Shalaby wrote a blog post for other activists containing guidelines suggesting best practices for the design of effective political flyers to help other activists get their message across. He also provided visual examples of different flyers that were distributed in Tahrir and outlined the advantages and disadvantages of each. Similarly, blogger Sandmonkey wrote a blog post on February 6, 2011 organizing and fostering a teamwork culture and collaboration among his fellow protestors:

> So here are my two cents: next time when you head to Tahrir, alongside blankets and food and medicine, please get some foldable tables, chairs, papers, pens, a laptop and a USB connection. Set up a bunch of tables and start registering the protesters. Get their names, ages, addresses & districts. Based on location, start organizing them into committees, and then have those committees elect leaders or representatives. Do the same in Alexandria, in Mansoura, in Suez, in every major Egyptian city in which the Protesters braved police suppression and came out in the thousands.

Amina Elbendary, an assistant professor of Arab and Islamic Civilizations at the American University in Cairo, clearly thought that web 2.0 tools had a very important role in gathering people around common goals, showcasing successful stories from the other side of the globe, and promoting street action among Egypt's youth. She stated:

> Thanks to technology, the young people of Egypt — and undoubtedly the rest of the Arab world — have seen other people, just like them, rise up and grab their freedom with their own teeth. They saw the Tunisians do it a few weeks ago, and they recognized a commonality with Tunisians and with the rest of humanity. And on Tahrir they met with the other within and realized this commonality (Elbendary, 2011).

Purpose of the Study and Research Questions

Egypt's youth have gone through the disorienting dilemmas of unemployment, social exclusion, delayed marriage, and loss of personal autonomy (UNDP, 2010; Angel-Urdinola & Semlali, 2010). They also went through different stages of questioning, planning collective actions, and participating in reflective discourse. Knowing the potential of transformative learning experiences uniquely grounded in the nature of human communication (Taylor, 2007) and the potential role of Web 2.0 tools for that communication, collective action, knowledge co-construction, and autonomy, one must investigate the learning experience of students involved in social activism through their interaction in and use of Web 2.0 technologies. Egypt's youth provide an interesting lens through which to study the learning that happens outside of formal academic classrooms, particularly, "the incidental learning which occurs as people engage in social action and emancipatory social struggle" (Foley, 1999).

Given this context, the purpose of this study is to explore the nature of the learning experiences of students involved in civic collective action, specifically; what they learn by becoming student activists, their perspectives about their new role in society, the nature of learning during involvement in social and political reform, and the role of Web 2.0 technologies in the learning process. The research questions this study strives to answer delve deep into how Egyptian students understood this phenomenon:

1. After the 2011 Egyptian revolution, what meaning did the student activists derive from their new role in society?
2. According to these students' perceptions, what was the nature of learning occurring as they engaged in social action in both Web 2.0 and real world urban spaces?
3. According to these students' perceptions, does the use of Web 2.0 tools encourage offline urban space activism?

This study will employ a narrative qualitative research design. This approach to research aims at exploring the collective and subjective experiences of students who wanted to bring about political and educational reform in Egypt. The research design will be discussed later in Chapter 3.

Significance of the Study

The majority of research and theory on transformative learning and collective action comes out of North America and Europe; to fully understand the nature of learning that occurs during social action requires a more inclusive global lens, one that includes societies where, "educated youth live under conditions of political repression and economic exclusion" (Herrara, 2012). In addition, the impact of web 2.0 tools has been documented in democratic societies, there has been a comparative paucity of insight as to their implications in authoritarian countries (Wenker, 2012). This study will contribute to knowledge within the realm of educational technology by exploring the effects of collective action and learning using Web 2.0 technologies in authoritarian countries. It will provide an opportunity for the participants to reflect on their learning and make it explicit. The environment of curriculum reform in Egypt may be more effective and representative as a result of giving voice to its main stakeholders; students, who have historically been excluded from the ongoing reform discussions. This study will trace and

emphasize the informal educational value of Web 2.0 technologies. Finally, it seeks to inform designers, policy makers, educators and educational institutions about the benefits of using Web 2.0 in formal learning. The next chapter will provide an in-depth overview of relevant literature to further situate the study in the current academic context.

Chapter Two: Literature Review

This chapter will describe current literature related to the proposed research study, which stands at an intersection between education, social action, and technology research. Chapter two first explores the key concepts of transformative learning; examining how it takes place, its benefits and barriers, exploring the emancipatory, transformative learning that occurs in social action, and unfolding the role of Web 2.0 technologies as transformational learning tools. Finally, the literature reviewed will be summarized and related back to the research at hand.

Transformative Learning

The first researcher to develop a concept of transformative or transformational learning and fully conceptualize it was Jack Mezirow (1991). In 1981, Mezirow researched the cognitive process adults go through to acquire new skills and knowledge (Mezirow, 1981). He then suggested practical strategies for fostering transformative learning (Mezirow, 1990). Later, in 1991, he presented a comprehensive model of his theory of transformative learning, basing it on humanism and critical social theory (Mezirow, 1991). Currently, there are a variety of theoretical perspectives on transformative learning and the tendency to think in dualisms (Taylor, Cranton, & associates, 2012). Some scholars view transformation as a rational process (Mezirow 1991, 1994; Brookfield, 2009), while others see it as an extra-rational process (Boyd & Myers, 1988; Clark and Wilson, 1991; Dirkx, 2001, 2012). Similarly, some scholars focus on individual change (Mezirow, 1991, 95, 2000; Boyd & Myers, 1988; Clark, 1993; Kegan, 2000) while others focus on social change (Freire, 1970; Foley, 2009; Ntseane, 2012). By the mid-2000s, Mezirow's theory had evolved to become an increasingly holistic one, infused with ideas from other scholars (Baumgartner, 2012). While this paper will focus on Mezirow's contemporary, holistic theory, acknowledgement will be duly given to the scholars who influenced Mezirow's

conceptions. In general, the aim of transformative learning theory is to provide an explanation for the, “changes in consciousness within the learner” (Clark, 1993), and more specifically, how adults change the way they make meaning and interpret their world (Taylor, 2007).

Making Meaning. "A defining condition of being human is our urgent need to understand and order the meaning of our experience and our continuous effort to negotiate contested meanings” (Mezirow, 2000, p.3). Transformative learning theory is primarily based on constructivist assumptions where reality, “is less an objective fact and more a subjective construction by individuals and societies"(Clark, 1993). According to Mezirow (1990), to make meaning means to interpret an experience. The personal meanings that we attribute to our experiences are acquired and validated through human interaction and communication (Mezirow, 1991). From this perspective, learning is a social process of using a prior interpretation to construct or revise the meaning of one's experience as a guide to subsequent appreciation, understanding, and action (Mezirow, 1994). Assumptions, perspectives, and anticipations acquired from past experiences shape, delimit, and sometimes distort our expectations and feelings, and set our line of action (Mezirow, 1997). When we encounter a new situation or idea, we may tend to strongly reject it if it fails to fit our preconceptions; we may enter a transformative learning process, however, whose influence could lead to a transformation of our meaning perspectives (Mezirow, 1997).

Meaning Perspectives. Meaning perspectives, often referred to as “frames of references” (Mezirow, 2000), are coherent bodies of experience acquired over a lifetime. Frames of references develop during childhood and adolescence, and define how we see, interpret, and act in the world (Mezirow, 1994). They are a cognitive, conative, and emotional set of assumptions that include associations, concepts, values, beliefs, cultural and societal assimilations, and

propositions (Mezirow, 1997). Frames of references may include psychic structures such as, "ego, persona, shadow, and collective unconscious" (Boyd & Myers, 1988; Dirkx, 2006), or higher orders of consciousness or "epistemic knowledge"—how we make meaning (Kegan, 2000), or sociolinguistic (ideologies, social norms), moral-ethical (moral norms), philosophical (religious doctrine, philosophy), or aesthetic (tastes, standards) ideas (Mezirow, 2000). According to Mezirow (2000), a frame of reference is composed of habits of mind—broad, habitual ways of thinking and feeling—expressed as a point of view, which represents clusters of meaning schemes such as expectations, feelings, beliefs, and judgments. Examples of frames of references are stereotypes, prejudices, and distortions (Mezirow, 1997, 2000). These frames of references are the "form," or raw material, that undergo change during a transformational learning experience (Kegan, 2000).

Perspective Transformation. For Mezirow (1981), perspective transformation denotes, "an emancipatory process of becoming critically aware of how and why the structure of psycho-cultural assumptions has come to constrain the way we see ourselves and our relationships, reconstituting this structure to permit a more inclusive and discriminating integration of experience and acting upon these new understandings." As such, awareness and understanding are key factors in Mezirow's conception of perspective transformation. The process can be a rational experience for one person in one context (Mezirow, 1981), or an unconscious (Boyd & Myers, 1988), emotional or intuitive experience in a different context for someone else (Drikx, 2006). Kegan's (2000) conception of perspective transformation is an epistemological change where we change the very "form" by which we are making our meaning; "trans-form-ative learning puts the form itself at risk of change." (Kegan, 2000, p. 42). Though the process of transformation can differ depending on, "the person or people and the context or situation", the

outcome is the same— "a deep shift in meaning perspectives" (Taylor, Cranton, & associates, 2012), and results in transformed "frames of reference that will more likely generate beliefs and opinions that will prove more true or justified to guide action" (Mezirow, 2003, p.59).

Domains of Learning. Mezirow (1981) referred to the epistemology of Jürgen Haberma's Communicative theory to describe three domains of learning through which our frames of references evolve. Mezirow asserted that these domains of learning could occur within existing meaning schemes, inside a newly created meaning scheme, or within a transformed meaning scheme or perspective (as cited in Baumgartner, 2012). These three domains are; 1) Instrumental learning—learning to control and manipulate the environment or other people to improve performance, as in task-oriented problem solving, 2) Communicative learning—learning what others mean when they communicate with you, which often involves reading feelings, intentions, values, and moral issues, and 3) Emancipatory learning—learning that occurs through critical self-awareness. We test our interpretations and beliefs instrumentally through hypothesis testing and empirical measurement when we can and justify them, and communicatively through reflective discourse (which will be expanded upon later in this chapter) when we cannot. Transformative learning requires critical reflection about one's own assumptions and those of others, and the acquisition of communicative competence—"the ability of the learner to negotiate her purposes, values, feelings, and meanings rather than to simply act on those of others" (Mezirow, 2000). This leads Mezirow (1991, 1997, 2000) to define transformative learning as, "the process of effecting change in a frame of reference."

Transformation vs. Information. Mezirow (1991) asserted that adult learning that merely adds new meaning schemas or knowledge is not considered transformative. Kegan (2000) referenced Piaget (1954) to distinguish between transformational learning and informational

learning. Informational types of learning are, “Assimilative processes, in which new experience is shaped to conform to existing knowledge structures”; whereas transformational types of learning are, “Accommodative processes, in which the structures themselves change in response to new experience” (Piaget 1954 as cited in Kegan, 2000). Transformational learning induces more far-reaching change in the learner than other kinds of learning, particularly when the experience reshapes the learner and produces a significant impact, or paradigm shift, which affects the learner's subsequent experiences (Clark, 1993). As such, transformative learning experiences, “alter one’s core beliefs about oneself and the world” (Tisdell, 2012).

How Transformative Learning Takes Place

Mezirow’s seminal research, based on the experiences of women reentering college in later life (1978), resulted in the definition of transformative learning as a ten-phase developmental process. In 2000, Mezirow further refined and reordered the steps of the transformative learning process. Transformations often follow some permutation of the following phases (Mezirow, 2000, p.22):

1. A disorienting dilemma
2. Self-examination with feelings of fear, anger, guilt or shame
3. A critical assessment of assumptions
4. Recognition that one’s discontent and the process of transformation are shared
5. Exploration of options for new roles, relationships, and actions
6. Planning a course of action
7. Acquiring knowledge and skills for the implementation of plans
8. Provisional testing of new roles
9. Building competence and self-confidence in new roles and relationships

10. A reintegration into one's life on the basis of conditions dictated by the new perspective

Mezirow's ten-step transformative learning process begins with a "disorienting dilemma" or experience; this is an event that induces powerful emotional responses such as the death of a loved one or a personal crisis. The event leads people to practice "critical reflection" where they begin to question their assumptions and the validity of their world-view. Next, people realize that others share their discontent and they start testing new relationships, roles, and actions, participate in a reflective discourse, and plan a course of action. A reflective discourse helps people shift their focus from their world views to others', as well as build the competence and self-confidence needed to integrate the new perspective. Mezirow (2000) sees the combination of critical reflection and discourse as the primary vehicle for producing people who are more inclusive, open, reflective, and emotionally able to change their world-view. In the following section the central concepts of transformative learning are discussed.

Central Concepts of Perspective Transformation

The Role of Experience. A perspective transformation often occurs either through a series of cumulative changes to meaning schemes or as a result of a personal or social crises such as a natural disaster, the death of a significant other, divorce, a debilitating accident, war, or job loss (Taylor, 2008). Mezirow (2000) uses the term "disorienting dilemma" to describe such traumatic experience/crises. For example, many live life assuming that if one does his best, he should be rewarded. If suddenly fired despite exemplary performance and adherence to company rules, a worker will become aware of assumptions, once accepted unquestioningly, that now need to be scrutinized for their accuracy and validity (Brookfield, 2009).

Critical Reflection. Post facto reflection, which looks back on prior experiences, focuses on assumptions about the content of the problem, the process or procedures followed in problem

solving, or the premise on which the problem is based (Mezirow, 1990). Reflections about premises or presuppositions is known as critical reflection—a central concept of transformative learning that enables us to correct distortions in our beliefs and errors in problem solving (Mezirow, 1998). Critical reflection may be either implicit, as when we unconsciously choose between good or evil based on our assimilated values, or explicit, when we deliberately examine and assess the reasons for making a choice (Mezirow, 1998).

Critical reflection is a rational endeavor through which the underlying premises of ideas and beliefs are assessed and critiqued, and generally requires higher mental processes (Mezirow, 1990) and mature cognitive development (Merriam, 2004). However, Dirkx (2006) suggests that engaging, "the whole person (as an affective, intuitive, thinking, physical, spiritual self) provides an opportunity, for establishing a dialogue with those unconscious aspects of ourselves (i.e. ego, persona, shadow, and collective unconscious) seeking expression through various images, feelings, and behaviors" (Dirkx, 2006). This conception proposes that rather than merely relying on reason and rationality, a successful transformative learning experience requires an active dialogue between participants' feelings and reason (Taylor, 2008).

Brookfield (2009) describes four stages necessary for a critical reflection process. The first is to clearly identify the assumptions already in place about the subject. Second, we examine the validity of those assumptions based on evidence, and calculate whether accepting them will lead to what we expect. Third, we look at alternative perspectives by examining the situation through the eyes of others (this is referred to as "reflective discourse," which will be explored further in the following section). This step leads us to analyze whether our starting assumptions are still valid. Finally, based on this careful analysis, we take informed actions (ex. behavioral, cognitive). According to Brookfield (2009), critical reflection must challenge

hegemonic assumptions, particularly, “those assumptions that we believe represent common sense wisdom and that we accept as being in our own best interests, without realizing that these same assumptions actually work against us in the long term by serving the interests of those opposed to us.” (P. 301).

Mezirow (2000) identified two different kinds of critical reflection through which transformative learning may occur: 1) objective reframing and, 2) subjective reframing. Objective reframing involves critical refection about the assumptions of others encountered in a narrative or during task-oriented problem solving. Subjective reframing involves critical self-reflection about one’s own assumptions, which is often an intensely threatening emotional struggle in which we have to become aware of and challenge the premises of old assumptions and realize the need to change (Mezirow, 2000). Subjective reframing therefore requires the support of others, a positive self-concept, and freedom from intense anxiety (Mezirow, 1998).

Discourse. In the context of transformative learning, discourse is understood as: “that special function of dialogue devoted to searching for common understanding and assessment of the justification of an interpretation or belief” (Mezirow, 2000, p.78). Discourse is reflection made public (Clark, 1993). It leads to clearer understanding by tapping collective experience to arrive at a tentative best judgment (Mezirow, 2000). Mezirow (1994) explains: “We search out those we believe to be most informed, objective, and rational to seek consensus in the form of a best collective judgment. We settle for a best judgment, given a careful assessment of reasons, arguments, and evidence.” (p.225).

Mezirow suggested certain conditions for the full realization of discourse. These conditions include participants having accurate, complete information, being able to weigh evidence, assess arguments objectively (Mezirow, 1994), having greater awareness of the context

of ideas (Mezirow, 2000), having an open mind, learning to listen empathetically, bracketing premature judgment, seeking common ground, and being emotionally intelligent (Mezirow, 2003). These skills are assets that help adults assess alternative beliefs and participate fully and freely in critical-dialectical discourse. “Finding one’s voice is a prerequisite for full participation” (Mezirow, 2000). The process of transformation is greatly enhanced when we are encouraged to engage the dilemma in a manner that inspires new ways of perceiving it (Taylor & Elias, 2012).

Mezirow asserts, “Hungry, desperate, homeless, sick, destitute, and intimidated people cannot participate fully and freely in discourse” (Mezirow, 2003, p.60). Societies characterized by contractual relationships and who value individuality highly encourage perspective transformation (Mezirow, 1978). In specific, economic, social, and psychological conditions that foster social justice are essential in effective critical-dialectical discourse (Mezirow, 2003). When one’s community persistently resists any challenges against its ideas, however, the individual—who is already burdened by self-questioning—faces the added anxiety of potential loss of the group (ex. Family, tribe) that acts as a primary source of identity and belonging (Taylor & Elias, 2012). Social surroundings often act powerfully to maintain distorted perspective (Taylor & Elias, 2012). Mezirow suggests that the only alternatives to critical-dialectical discourse in assessing and choosing among beliefs are the appeal to tradition, an authority figure, or the use of force (Mezirow, 2003).

Reflective Action. A mindful transformative learning experience requires that the learner make an informed and reflective decision to act on his reflective insight (Mezirow, 2000). This decision may result in immediate action, delayed action, or reasoned reaffirmation of an existing pattern of action (Mezirow, 2000). Taking action on reflective insights often involves

overcoming situational, emotional, and informational constraints that may require new learning experiences in order to move forward (Mezirow, 2000). Freedom involves not just the will and insight required to change but also the power to act to attain one's purpose (Mezirow, 2000). "Critical reflection, discourse, and reflective action always exist in the real world in complex institutional, interpersonal, and historical settings, and these inevitably significantly influence the possibilities for transformative learning and shape its nature" (Mezirow, 2000, p. 24).

For Mezirow transformative learning, "may be *epochal*, a sudden, dramatic, reorienting insight, or *incremental*, involving a progressive series of transformations in related points of view that culminate in a transformation in habit of mind" (2000, p. 21). Transformative learning has neither a distinct beginning nor ending, it is eternally present within the learner, and it is seen as a way of being rather than a way of becoming (Dirkx, 1998).

Benefits of and Barriers to Transformative Learning

Mezirow's conception of transformative learning (1991) uses a rational, responsible, autonomous adult as the unit of analysis. Mezirow's views assume that humans construct knowledge, that adults have the potential for a high level of freedom of thought and action, and presumes a democratic vision of society in which individuals are responsible for their collective future (Clark, 1993). The goal of transformative learning is undoubtedly to, "gain control, a sense of agency, and personal responsibility over ourselves and our lives" (Mezirow, 1981).

One major benefit of transformative learning is the development of autonomous thinking, which is a competence that can be acquired through the process itself (Mezirow, 2000). Learning to negotiate one's own values, meanings, and purpose rather than uncritically act on those of others fosters autonomous thinking (Mezirow, 1997). Achieving greater autonomy in thinking means, "acquiring the understandings, skills, and dispositions required to become more aware of

the context of interpretations and beliefs, critically reflective of assumptions, able to participate freely and fully in rational discourse to find common meaning and validate beliefs, and become effective in acting on the result of this reflective learning process" (Mezirow, 2000).

Another benefit of transformative learning is adult development. Numerous research and empirical studies offer support for the idea that transformative learning is developmental (Taylor, 1998; 2007; 2000). Development in adulthood may be understood as, "a transformative process of meaning becoming clarified through expanded awareness, critical reflection, validating discourse, and reflective action as one moves toward a fuller realization of agency" (Mezirow, 2000, p. 25).

Critics of Mezirow's model of transformative learning note that the experiences of democratic Western societies, which systemically foster social justice, are presented as universal (Boyd & Myres; 1988; Clark & Wilson, 1991). This criticism brings up a fundamental question posed by this thesis: are the values of non-Western societies a barrier to transformative learning? For instance, traditional African value systems embrace a collective rather than individual concept of responsibility; interdependence instead of independence; and a unity of spirit, body, mind, and emotions in learning rather than a focus on the purely cognitive (Ntseane, 2012). Mezirow (2000) asserts that, "The process of self-empowerment, acquiring greater control of one's life as a liberated learner is limited by social, historical and cultural conditions. Cultural canon, socioeconomic structures, and ideologies often conspire to foster conformity and impede development of a sense of responsible agency (Mezirow, 2000, p. 8). Conversely, Ntseane (2012) asserts that African people have a history of transformative learning as a result of social change during periods driven by colonialism, imperialism, and global capitalism. This discrepancy in the theoretical perspectives of transformative learning poses interesting questions;

how do adults living in non-Western, authoritarian countries achieve transformative, superior meaning perspectives? How can they contest hegemonic concepts and beliefs? In the following section, emancipatory learning, social struggle, and Freire's conceptions of transformative learning present some answers to these questions.

Freire's Conceptions of Transformative Learning: A Link between Reflection and Action

In Paulo Freire's model of transformational learning the goal is the creation of democracy and social change (Clark, 1993). His version of transformative learning does not merely change the learner, it transforms the whole society. His thinking demonstrates the power of learning as a liberating force where learners, not as recipients but as knowing subjects, achieve a deep awareness of both of the socio-cultural reality that shapes their lives and their capacity to transform it (Mackie, 1980). Freire asserts that the "banking" approach to education, which treats students as passive entities uncritically receiving information from the educator, only serves the interest of the oppressors and instructs people to adapt to the world they create (Freire, 1997). Freire (1997) asserts that the way to oppose the concept of banking is through dialogue and problem-solving. Accordingly, impeding such dialogue dehumanizes people and props up the status quo (Freire, 1997). Similar to Mezirow's concepts of critical reflection and discourse, Freire's "conscientization" or "critical consciousness" (1997), which does not occur automatically but through human communication, enables people to become aware of the oppressive social structures in their world, understand how those structures have influenced their own thought, and recognize their power to change their world.

The process of conscientization is a vehicle promoting the freedom, awareness, and autonomy of learners in transforming society and their own reality (Taylor, 2008). This is achieved through praxis; a combination of action and reflection (Clark, 1993). Accordingly,

praxis—action that is informed—becomes the means of changing the people's realities and those of their societies. Mezirow (1989) asserts that individual transformation can lead to social action. Specifically, that transformative learners, with social change as their objective, may seek out others who share their insights to form resistance cells who challenge unexamined cultural norms in communities, families, and political life, and become active agents of social and cultural change (Mezirow, 2000). Other scholars suggest that in some contexts, social change may need to precede individual change, and that in others individual transformation drives social transformation (Taylor, Cranton, & associates, 2012).

Freire's conceptions, which "suggest a means by which all people can live freely and with dignity in a just society" (Clark, 1993), inspired many scholars, including Griff Foley (1999), whose work is focused on the nature of learning that occurs in social action. His work is discussed in the next section.

Transformative Learning in Social Action

Foley (1999) presents an interesting account of how engagement in voluntary community projects, political activities, and social struggles can result in powerful learning opportunities, the transformation of power relations, self-agency, and individual and social change. Foley's inclusive efforts toward emancipation (1999) presented a series of genuine, global case studies from across the world, including the United States of America, Australia, Brazil, and Zimbabwe, and suggested a forum where diverse environments, women, and under-represented social groups could find a voice. His work provides a balance in the, "literature and theoretical perspectives that are dominated by Euro-Western thought unrepresentative of the universal experience." (Ntseane, 2012). His case studies show how involvement in social action can empower people;

particularly if it helps them unlearn dominant, oppressive ideologies and discourses, and learn oppositional, emancipatory ones.

For instance, Foley (1999) examined the learning dimension of women's movements in Brazil during the period of military rule, a capitalist economic boom, and transition to formal democracy between 1964 and 1989. He focused on the changes in women's political consciousness and the actions they took as a result. Foley found that while broad economic and political changes created the material conditions for social movements, these changes did not by themselves generate such activity. Foley (1999) concludes that, "for people to become actively involved in social movements something had to happen to their consciousness—they had to learn that social action was necessary and possible." (p.5). Similarly to the concept of dialogue in Freire's work and Mezirow's reflective discourse, Foley found that oppositional human discourses on human rights, social justice, feminism and liberation theology were significant in creating the subjective conditions required for political action by women in Brazil. Foley acknowledged, however, that while emancipatory learning is possible, "it is also inevitably complex, ambiguous and continually contested." (1999, p. 131).

Since 2011 the Arab world has been witnessing revolutions, mass public dissent, protests, and social movements. These movements emerged from causes specific to each country including political oppression, dire economic conditions, lack of human rights, and violence from the state. The majority of these countries' populations are composed of people under 30 years of age, relatively educated, socially and politically excluded, and unemployed or underemployed (Castells, 2012). While these differing movements evolved according to the conditions of their contexts, they were all stimulated by hope and followed the same model: "Calls on the internet, networking in cyberspace and calls to occupy urban space to put pressure

on the government to resign or open a process of democratization" (Castells, 2012). Internet networks, and particularly Web 2.0 tools, provided a space from where social action emerged in different forms and with different results depending on the social context. There is an intense academic debate about the precise role of Web 2.0 tools in these movements, and whether Web 2.0 is, "inherently a tool of democratization" (Faris, 2013). The role of Web 2.0 tools in social action is discussed in-depth in the following section.

Transformation and Web 2.0

Web 2.0. The term "Web 2.0", first coined in 2005 by Tim O'Reilly (O'Reilly, 2005), refers to, "internet platforms that allow for content generation and interactive participation by users" (Kaplan & Haenlein, 2010). Web 2.0 is characterized by a transition from, "the presentation of material by website providers (Web 1.0) to the active co-construction of resources by communities of contributors" (Dede, 2008). The term also denotes a wide range of other concepts, including: "Web sites based on a particular set of technologies such as AJAX; Web sites which incorporate a strong social component, involving user profiles and friend links; Web sites which encourage user–generated content in the form of text, video, and photo postings along with comments, tags, and ratings (Cormode & Krishnamurthy, 2008). O'Reilly (2005) describes the critical components of Web 2.0: 1) "participation" as opposed to publishing or dumping print content in the internet; 2) "radical trust," which refers to implicit trust in the input provided by people through online communities; 3) "radical Internet decentralization" whereby each user is considered a server and files are broken up into fragments that can be served from multiple locations; 4) "tagging" in contrast to taxonomy, a style of collaborative categorization of sites using freely chosen keywords referred to as "tags." The subsequent section lists the application and tools incorporated by Web 2.0.

Web 2.0 Tools. Web 2.0 tools include social networking sites, such as MySpace, Facebook, and Ning; media sharing applications such as YouTube and Flickr; social bookmarking, such as Delicious and CiteULike; collaborative knowledge development through Wikis (e.g., Wikipedia); creative works, such as podcasts, videocasts, blogs, and microblogs (e.g., Twitter, Blogger); content aggregation and organization, such as RSS (Really Simple Syndication) feeds and tagging tools; and remixing or mash-ups of content from different content providers into new forms, such as combining geographical data with transportation or crime data (Greenhow & Robelia & Hughes, 2009). According to O'Reilly (2005), Web 2.0 tools and applications, "are those that make the most of the intrinsic advantages of the Web2.0 platform." Those applications, O'Reilly explains, are, "continually-updated service that gets better the more people use it, consuming and remixing data from multiple sources, including individual users, while providing their own data and services in a form that allows remixing by others, creating network effects though an architecture of participation, and delivering rich user experiences."

One of Web 2.0 tools mentioned above is Wikis. Arazy et al. (2009) refer to Wikis as "Open Content Systems" –mass collaboration projects that have demonstrated, "the feasibility of many individuals coming together to create valuable outcomes despite the apparent lack of central coordination or control." There is an increased interest in the creation of user-generated content through user-led spaces in Web 2.0. For example, Burns (2008) suggests that users of social media applications do not only consume information found online, but also have a role in producing it. Through Web 2.0 there is a process of collaborative creation of content using text, photos and videos. He describes this process using the term "produsage," or breaking down the boundaries between producer and consumer, enabling all participants to both consume and produce knowledge, encouraging collaboration, and continually improving the existing content.

As such, Web 2.0 tools have transformed the way in which knowledge and knowledge-bases are constructed online (Burns, 2008).

Knowledge Co-Construction in Web 2.0. Dede (2008) explains the distinction between the classical, historical definition of knowledge and the Web 2.0 version. Unlike the traditional term, the Web 2.0 definition of knowledge is, "collective agreement about a description that may combine facts with other dimensions of human experience, such as opinions, values, and spiritual beliefs" (p. 80). Information is constructed by negotiating compromises among various points of view. User-editors create, edit, and police the content (O'Reilly, 2005). The epistemology that leads to validity of knowledge in Web 2.0 media such as Wikipedia is peer-review from people seen, by the community of contributors, as having unbiased perspectives (Dede, 2008).

By contrast, in the classical view of knowledge, "experts with substantial credentials in academic fields and disciplines seek new knowledge through formal, evidence-based argumentation, using elaborate methodologies to generate findings and interpretations, compile knowledge, and transmit it to learners." (p.80). Coiro et al. (2008) point out the challenges that growing amounts of online information produce. As people contribute more and more information to the Internet, the difficulty in analyzing it and determining its reliability grows along with it (Coiro et al., 2008). Among the many technical features of Web 2.0, however, is, "the employment of feeds and recommendation systems to bring information and media to us along with community rating of its value" (Ravenscroft, 2009). Surowiecki (2005 as cited in Arazy et al., 2006) suggests that the aggregate knowledge of a large group is superior to the knowledge of one or a few experts. O'Reilly (2005) asserts that the foundation of Web 2.0—hyperlinking—is what makes it powerful. "As users add new content, and new sites, it is bound in to the structure of the web by other users discovering the content and linking to it. Much as

synapses form in the brain, with associations becoming stronger through repetition or intensity, the web of connections grows organically as an output of the collective activity of all web users." (O'Reilly, 2005).

For example, some studies refer to Facebook as a space for storytelling. Storytelling in this context is, "the telling of small, personal, intimate, and mundane experiences" (Jong, 2014) that reveal epistemic shifts on personal and intimate terms (Lorimer, 2003). Robards (2012) claims that Facebook as a social site is not only a space in which young people can form and form a sense of self and belonging through socialization and communication, but also acts as a reflexive space where narratives of transition (e.g. from adolescent to adulthood or from one experience to another) occur, are commented upon, and are recorded and archived: the digital footprint of transition. Robards' research shows that Facebook as a social space invites social exchanges and prompt users to articulate the more mundane, inconsequential goings-on of everyday life.

In one study, Laura West (2013) explained in detail the process of creating stories out of small posts on Facebook. She examined the sharing of an unfolding life event (the remodeling of a new house) on Facebook through short story posts. Facebook was an ideal venue for audience collection, particularly for linking the protagonist's narrative with people within the same social circle. This type of audience can then recreate the narrative and assist in shaping the small stories and connecting them discursively with the larger narrative that exists partially in other applications including blogs, and has partially yet to be experienced. Similarly, Mcloughlin and Lee (2007) describe the process of storytelling as, "digital content in small fragments that may be combined and recombined by individuals to produce new patterns, images and interpretations."

Another study argued that user-created content encourages autonomy while simultaneously providing opportunities for greater interaction and deeper engagement with peers because the awareness of an audience encourages more thoughtful construction of writing and arguments during knowledge creation (Williams and Jacobs, 2004). Mnisi (2015) found that students in a rural community in South Africa who had experienced, witnessed, or heard about HIV- and AIDS-related stigma used digital storytelling in order to take charge of effecting change in their community.

In the following section the applications which support the creation and exchange of user generated content, namely Social Media Networks, are discussed more in detail.

Social Media Networks. The rise of Web 2.0 has led to the creation of what Shirky (2011) refers to as 'Social Media' (Shirky, 2011), or what other scholars call 'Social Media Networks' (Faris, 2013) or 'Social Media Sites' (Ellison, 2007). Ellison (2007) defines Social Network Sites (SNS) as, "web-based services that allow individuals to 1) construct a public or semi-public profile within a bounded system, 2) articulate a list of other users with whom they share a connection, and 3) view and traverse their list of connections and those made by others within the system." SNS enable users to make visible their social networks, which can result in connections between individuals that would not otherwise be made (Ellison, 2007). Moreover, Social Media Networks (SMNs) are seen to address the needs of Web 2.0s' diverse users by, "enhancing their experiences through customization, personalization, and rich opportunities for networking and collaboration" (Bryant, 2006). They also allow the spread of media consumption and production, which in turn allows people to privately and publicly articulate and debate a mass of conflicting views (Shirky, 2011).

Web 2.0 social media tools are used by participants in online communities that exist in many forms and for many purposes (Thomas, 2008). Groups range from political discussion and lobbyist groups, to gaming groups, self-help groups, and interest and hobby groups (Thomas, 2008). Contemporary empirical studies suggest that Web 2.0 platforms, specifically SMNs, represent a turning point in innovative 21st century coordination and mobilization of grassroots movements (Herrera, 2012; Faris, 2013; Perez, 2013), develop public awareness, propel real-life protests, and incorporate Web 2.0, alongside other forces, as tools for social change (McCaughey & Ayres, 2003). Moreover, SMNs make it difficult for repressive regimes to control information or cover up news that is deemed threatening to governmental control (Shirky, 2011; Faris, 2013). On the other hand, some academics do not see Web 2.0 as a causal source of social change. In the following section the connection between Web 2.0 Social Media Networks and social action is discussed.

Social Media Networks and Social Action. Social action is the lever of social change. Social action such as protests, strikes, boycotts, campaigning, or demonstrations, "is often taken by disadvantaged group of people, relatively unstructured, in the face of inequality in order to improve the condition of the group as a whole" (Wright, Taylor & Moghaddam, 1990). Social action usually stems from crises that make everyday life unbearable and induces people to take matters into their own hands, engaging in collective action outside prescribed institutional channels (Castells, 2012). Communicative action such as sharing emotions (i.e. fear and anger) and identifying with others induces collective action (Castells, 2012). Social media is now the predominant platform of communication, and involves many actors — regular citizens, activists, nongovernmental organizations, telecommunications firms, software providers, governments (Shirky, 2011). Shirky points out the potential political impact of social media as a long-term

tool that can support and strengthen civil society. For instance, Shirky sees obvious examples in demonstrations organized by text messaging in Spain in 2004, which led to the ouster of Spanish Prime minister José María Anzar, and the massive protests in Moldova in 2009, coordinated in part by text message, Facebook, and Twitter, which broke out after an obviously fraudulent election and led to the Communist Party losing power. During the June 2009 uprising of the Green Movement in Iran, however, activists used every possible technological coordination tool to demand the removal of Mahmoud Ahmadinejad from office but did not succeed, resulting in many participants being detained. Shirky also asserts that social media tools are not a replacement for real-world action but a way to coordinate it, and reminds us that the use of these tools does not have a single preordained outcome (2011).

Castells (2012) highlights the main characteristics of social movements around the world in recent years, networked in multiple forms. The networking form is multimodal, including online and offline social networks, preexisting social networks, and networks formed during the actions of the movement (Castells, 2012). Malcolm (2010) argues that real social change is brought about by high-risk, meaningful activism, suggesting that social media connections only promote weak ties and low-risk activism—"slacktivism." Castells (2012) explains that although movements are usually rooted in urban space through occupations and street demonstrations, their ongoing existence takes place in the free space of Web 2.0 (Castells, 2012). "Because they are a network of networks, they can afford not to have an identical center, and yet insure coordination functions, as well as deliberation, by interaction between multiple nodes." (Castells, 2012). Gladwell (2010) claims that, "Facebook activism succeeds not by motivating people to make a real sacrifice but by motivating them to do the things people do when they're not motivated enough to make a real sacrifice." On the other hand, Castells (2012) asserts that

people's connectedness to social movements depends on SMNs. Because people can only challenge domination by connecting with each other, by sharing outrage, and by feeling togetherness, their connectivity as well as their long-term existence depends on SMNs (Castells, 2012).

Contemporary research suggests that Web 2.0 social media tools possess many functions that make them desirable for dissidents in authoritarian systems. In particular, social media tools facilitate many-to-many communication, allowing individuals to share information instantly with large numbers of others, and increasing the geographic and spatial reach of such information—news of arrest, the date and time of a demonstration, or the impending arrival of security forces (Faris, 2013). Activists also use SMNs to create their own media in order to counter hegemonic messages, misinformation, and the negative portrayals of activism typical in the mainstream press (Harlow & Harp, 2012). SMNs are also used by activists to encourage offline participation in activist causes because online interactions present a "safe" place to begin their involvement(Taha, Hastings, & Minei, 2015).

While disciplined and coordinated groups have always had an advantage over undisciplined, loose ones by using strategic hierarchies with a precise allocation of tasks (Gladwell, 2010), social media networks can compensate for the disadvantages inherent in undisciplined groups (Shirky, 2011). Faris (2013) lists three advantages of SMNs that help social movements with loose ties become more efficient: 1) SMNs make organizing and coordinating cheaper and faster—people are able to form groups, at low cost, with a very large number of people; 2) SMNs make it easier to arrive at shared understandings of meaning—"the ability of each member of a group to not only understand the situation at hand but also understand that everyone else does" (Shirky, 2011); and 3) SMNs strengthen weak ties and enlarge offline social networks, which may have a positive overall effect by encouraging others to contribute. The best

practical reason to think that social media can help bring about political and social change is that is that, “all over the world, activists believe in the utility of these tools and take steps to use them accordingly, and the government that they struggle with think social media tools are powerful too, and are willing to arrest, exile, and kill users in response.” (Shirky, 2011).

Since Web 2.0 technologies facilitate communication and reflection (O’Reilly, 2005) a growing number of researchers are interested in examining transformative learning experiences in online contexts. The potential of social media as a transformational tools in authoritarian societies lies in, “supporting citizens to communicate among themselves, create a counter-public sphere of discourse, frame their views, and coordinate their action” (Shirky, 2011). This is similar to Mezirow’s concepts of critical reflection and reflective discourse. As stated previously, mere access to information is not what Web 2.0 supports. Web 2.0 fundamentally supports participation, conversation, and dialogue among a mass of local and global participants, which can increase shared awareness, or what Mezirow (2000) refers to as a more inclusive, open, and reflective world-view. This inevitably leads to calling authoritarian states to account for anomalies between their view of events and the public’s (Shirky, 2011).

Although studies suggest that transformative learning theory is a useful framework for understanding students’ online learning process, at present, little is known about the potential of the online setting as an avenue for fostering transformative learning (Taylor, 1998; 2007; Smith, 2012). In examining the affordances of Web 2.0 tools for collective action, knowledge co-construction, and autonomy, it is interesting to investigate whether the learning experienced by young activists who live in an authoritarian society may have been transformational.

The Use of Social Media Networks as Learning Platforms. Drawing on extant research and practice, some examples of the affordances of Web 2.0 technologies include

collaboration, information sharing and discovery, knowledge building, and content modification and creation (McLoughlin & Lee, 2007; Collis & Moonen, 2008; Conole & Alevizou, 2010; McLoughlin & Lee, 2010; Biasutti & Deghaidy, 2012; Bennett et al., 2012; Ekoc, 2014; Pattanapichet & Wichadee, 2015; Al-Rahmi, 2015). In the realm of higher education Web 2.0 social media applications are considered potentially enabling tools that 1) support greater learner choice— allowing learners to make decisions about which tools to use and how and where to use them based on needs for connection and social interaction, and 2) support self-direction— allowing learners to be free to decide how to engage in personally meaningful learning process through connection, collaboration and shared knowledge building. According to McLoughlin and Lee (2010), for example, when learners assume active roles Web 2.0 tools offer learning experiences that are active, process based, anchored in and driven by participants' interests, and therefore have the potential to cultivate self-regulated, independent learning whereby participants take the necessary steps to learn, manage and evaluate their learning, and provide self-feedback and judgment.

On social networking sites like Facebook, youth engage in informal learning, choose creative, expressive forms of behavior and identity seeking, and acquire social and communication skills, all the while developing a range of digital literacies (McLoughlin & Lee, 2007). Some recent studies in higher education also claim that the use of social networking sites like Facebook capitalizes on student interaction, collaboration, teamwork, engagement in the learning process, and active participation, which are vital to learning (Ekoc, 2014; Pattanapichet & Wichadee, 2015; Al-Rahmi, 2015).

Summary

The above literature review aims to provide an overview of the perspectives, ideological components, and findings that represent researchers' current body of work. The rest of this study explores some of the ways people learn as they live through their experiences, their struggles during transformational and emancipatory learning, how they get involved in social action, the autonomous space from whence their collective action emerges, and the causal effect of social media on social movements. The literature quoted above will also be used to guide the methodology and research questions described in the next chapter.

Chapter Three: Methodology

This chapter explains how the study was conducted, restates the research questions, and describes the scientific methodological approach, the procedures for data collection, participants' recruitment and consent procedure, the instrument used for data collection, the analysis of the data, and the researcher's biases. The chapter closes with a description of actions taken to ensure qualitative rigor and explains the limitations of the study.

Research Questions

The aim of this research is to study the perceptions of university students who participated in Egypt's 2011 revolution, both within Web 2.0 and in real world urban spaces. The purpose of this study is to; 1) uncover university students' subjective experiences of their role as social activists during Egypt's 2011 revolution; 2) explore their perceived learning experiences as they interacted within Web 2.0 and urban spaces; and 3) gain an understanding of the dynamics between online and offline activism.

The main research questions for this study are the following:

1. After the 2012 Egyptian revolution, what meaning did the student activists derive from their new role in society?
2. According to these students' perceptions, what was the nature of learning occurring as they engaged in social action in both Web 2.0 and real world urban spaces?
3. According to these students' perceptions, does the use of Web 2.0 tools encourage offline urban space activism?

The research proposal was submitted for approval to the University Human Research Ethics Committee (UHREC) prior to beginning my data collection in May 2014. After approval

was granted, the interviews with the participants took place in the month of June 2014. The analysis of the findings extended from September 2014 to March 2016.

Methodological Approach

This research study employs a qualitative research approach to develop an in-depth understanding of the dynamic and the continuously evolving process of meaning-making by student activists involved in social action during Egypt's 2011 revolution. My aim was to understand how these students gave meaning to their experiences by interpreting their thoughts, experiences, actions, and expressions.

Justification Behind the Methodological Choice. The layers of human experience are not rigidly ordered, nor their contents classifiable according to mathematical patterns; quantitative research methods are therefore not a good fit for the study of human experience (Polkinghorne, 2005). One of the main purposes of qualitative research is to describe and understand human phenomena, human interaction, and human discourse (Litchman, 2006). There are three reasons for choosing a qualitative-interpretive methodology for this study. Firstly, I wanted to gain an in-depth understanding of the study participants' frames of reference and uncover their interpretations of the meaning-making process (Courtenay, Merriam & Reeves, 1998). Secondly, the qualitative inquiry approach does not assume objectivity but instead privileges subjectivity (Riessman, 2013), which better suited my aims for this study. Thirdly, I opted for an in-depth qualitative interviewing method to develop a thorough understanding of the lived experience of social activist university students and the subjective understanding and meaning they made of their experience, in a perspective akin to Seidman (2013). For the aforementioned reasons, the objectives of this study and its research questions are better

addressed using a qualitative-interpretive approach that focuses on the perceived reality and experiences of the participants.

Procedure for the Data Collection

This section will describe the study's data collection procedure in detail, including how participants were recruited and how the data were analyzed in a credible and rigorous manner.

Participant Recruitment and Consent Procedure. A purposeful criterion sampling was used to recruit seven students who agreed to participate in this study and who were involved in social action in Egypt between 2011 and the present. I am a Canadian of Egyptian origin, have lived in Egypt, and am fluent in Arabic; in June 2014 I travelled to Egypt to recruit and interview potential participants. I was able to meet with several different social movements and human rights organizations that catered to the well-being of student activists, as well as trusted friends who introduced students involved in social action and interacted through Web 2.0 applications. An invitation to participation letter (Appendix B) was sent to facilitate recruitment through trusted groups and friends.

Once the SPF of this study was approved the recruitment letter, the interview questions and the consent form were translated into Arabic by the researcher, then checked by a qualified English to Arabic translator. To verify participants' information and ensure their eligibility, recruitment was done face-to-face by the author. No monetary or other reward was given for participation in the study in order to reduce any external motivations and mitigate the possibility

that participants fake or embellish their stories.

Table 1
Research Participants' Demographics

Name	Gender	Age	Educational Level	Program	Language spoken	Use of Web 2.0 Application	Involvement in Political Action
Mohamed	M	22	B.Eng.	Engineering	Arabic-English	Since 2009	Since 2009
Esraa	F	19	B.A.	Political Science	Arabic	Since 2008	Since 2011
Islam	M	28	Post-graduate studies	Film Studies	Arabic	Since 2007	Since 2010
Sara	F	23	B.Comm.	Commerce	Arabic	Since 2008	Since 2009
Mina	M	22	B.A.	Film Studies	Arabic	Since 2008	Since 2010
Said	M	23	B.A.	Education	Arabic	Since 2009	Since 2011
M. Ashraf	M	21	Associate degree	Social studies	Arabic	Since 2008	Since 2010

* All participants are Egyptians living in Egypt

Table 1 Participants' Demographics Table

Due to the nature of this study and security constraints, conducting online interviews was not an option as it could be easily tracked by Egyptian authorities and put the lives of participants at risk. The interviews took place entirely face-to-face to ensure that their contents remained private, and to protect the lives of participants and ensure that their identities remained hidden from the authorities. The locations of the interviews were chosen by the participants. Two of the interviews were conducted in a research academy, one in the head office of a political party, and the rest in different public cafes chosen by each participant.

Instrument for Data Collection. I chose to interview my participants to gain greater detail and depth in my data, to allow insight into how these individuals understood and narrated the political aspects of their lives, and to specifically tailor the interviews, informed by literature, to the knowledge and experience of the interviewees.

I interviewed each of the seven participants for 90-180 minutes each. Many of the interviews effortlessly exceeded the 180 minutes barrier as the participants engaged sincerely with the process and wanted to share the details of their stories. I conducted these interviews in Arabic and later adapted them into English. I used a semi-structured interview format to ensure that all interviewees addressed the same questions, allowing their responses to be compared.

Each interview, guided by Seidman's (2013) approach to in-depth interviewing, was divided into three sections. The first section, The Context, established the context of the participant's experience; the second section, The Details of the Experience, allowed participants to reconstruct their experiences in the present; and the third section, Reflection of the Meaning, encouraged participants to reflect on the meaning their experiences held for them.

The main interview questions for each section were the following:

1. The Context
    1.1. Tell me more about yourself. If you could tell me your life story in 5 minutes, what would it be?
    1.2. Describe to me your life before having been involved in social action
2. The Experience
    2.1. You mentioned that you are an activist. What does activism mean to you?
    2.2. What brought you to Tahrir Square?
    2.3. Describe a protest day from the time you wake up to when you go to bed.
    2.4. In what ways do you feel that social action affects your life?
        2.4.1. What has engaging in social action added to your life? How?
        2.4.2. What has engaging in social action taken away from your life? How?
    2.5. Have you experienced a change in your perspective or worldview? Describe it.

2.6. What is similar between the old you and your new role as an ‘activist’?

2.7. What is different between the old you and the new role as an ‘activist’?

2.8. Describe how do you use Social Network Sites (SNS), such as Facebook?

2.8.1. Have you used SNS since the revolution started in 2011? Why? How?

2.8.2. How do you interact with other activists through those sites?

3. Reflection of the Meaning

3.1. What have you learned about yourself through social action?

3.2. What does it mean to you to be portrayed as a political and social activist?

3.3. Describe how you feel when you interact with other activists.

3.4. If there were anything you could change in your life, what would it be?

3.5. Have you changed over the years? In what ways have you changed?

3.6. What do you think adolescents in Egypt could learn from young activists?

To read all the interview questions, please refer to Appendix B

Data Analysis

The first approach to data analysis was to retell the story of each participant. The interviews were conducted in Arabic, which is a particularity of this study. The Arabic language does not translate word for word into English. How one construct sentences, what colloquial expressions mean, the cultural significance of expressions and the interpretation of lived experiences are not things that can be translated with perfect accuracy; they must be adapted. Aside from validating the interviews with the participants, I had to translate, adapt, and validate the interviews with a third party, who served as an auditor in validating the Arabic-English translation.

Given this approach to adapting the Arabic language into English, I recreated each story to represent each participant as accurately as possible, but the process remains largely subjective. This is why it was crucial to have an auditor validate the translations.

In recreating the stories, I tried to minimize subjectivity by accurately reporting experiences related to Egypt's 2011 revolution, how the participants lived them, what these experiences meant for them, the lasting value of these experiences, and how Web 2.0 was influencing what was going on in Tahrir square. I inserted translated quotes from participants to help readers immerse themselves into the participants' stories. I also highlighted important aspects of the participants' lived experiences, which were informed by their personal and practical knowledge and how they answered the interview questions.

This first approach to data analysis lead to the exclusion of data from two out of the seven interviews (i.e. Said and M. Ashraf) because they provided general and limited answers to most of the research questions. These answers were not reflective enough about their experiences and added very little to the rich data collected from the other five participants.

The second approach to data analysis was informed by the themes emerging from the literature, which had also been used to structure the interview questions. I implemented a thematic approach by breaking up the text into pieces, comparing them, and assigning them to groups that addressed the same themes. Specifically, I followed the following eight steps as explained by Boeije (2010):

1. Read the whole document.
2. Re-read the text line by line and determine the beginning and the end of a fragment.
3. Determine why this fragment is a meaningful whole
4. Judge whether the fragment is relevant to the research.

5. Make an appropriate name of the fragment, i.e. a code.
6. Assign this code to the text fragment.
7. Read the entire document and code all relevant fragments.
8. Compare the different fragments to examine whether they should receive the same code.

The objective was to identify which codes were linked to the emerging themes, which codes turned up repeatedly, what the main message each participant was trying to bring across, how the themes were related, and what was important for the description of each participant's perceptions. This technique was inspired by Boeijie (2010).

To obtain more general findings, a third approach to data analysis was used to compare the data provided by the five participants. In this approach, I applied an interpretive cross-theme analysis to the research questions. Each of the themes that emerged from developed categories contained clusters of systematically arranged coded data. The coding process took three consecutive attempts (i.e. cycles) of recoding, refining, and managing the significant features of the raw data. The aim was to find the similarities and differences in the stories and use this comparison to come up with more general, higher level, and more abstract concepts. Finally, I interrelated the developed concepts and used them to answer the research questions.

Qualitative Rigour

A statement or knowledge claim is not intrinsically valid; rather, its validity is based on the force and soundness of the argument in support of the claim (Polkinghorne, 2007). In qualitative research, validation of claims about understandings of human experience—an area of the human realm that falls outside the limits of what has been conventionally thought to be accessible to validation—requires evidence in the form of personally reflective descriptions in ordinary language and analysis using inductive processes that capture commonalities across

individual experiences (Polkinghorne, 2007). Moreover, the reader plays an important role by making a judgment about the plausibility of a knowledge claim based on the evidence and argument for the claim reported by the researcher (Polkinghorne, 2007).

To ensure the trustworthiness of the data from collection to analysis I used several techniques; member checking, third-party audit of language adaptation, and a form of triangulation. I used a member check strategy by asking each of the participants to review the transcribed interview. I also used a third-party audit by asking a colleague who speaks Arabic and English to read the raw interview data and stories. I further used a form of triangulation by comparing and contrasting assembled stories with one another, with the emerging themes, and with other forms of literature (Polkinghorne, 2007). I also provided an interpretive analysis of the data received through interviews in the form of commentary that uncovers and clarifies the meaning of the text and the impact of the social and cultural setting on people's lives, as suggested by Polkinghorne (2007).

The Researcher's Role, Assumptions, and Biases

I embarked on this study having a set of personal biases and assumptions resulted from my origin and upbringing, my previous studies in Egypt, my carefully formed opinion about Egypt's 2011 Revolution and my personal experiences with Web 2.0 tools, including social media networks. In addition, my interest in the topic of this study arose from virtual interactions with young Egyptian activists on Facebook.

It is important to outline few major points concerning my personal experiences and position towards this research topic. Firstly, I have studied both in Egypt and recently in Canada, with more than a 10-year time gap in between. The two educational systems are almost at the opposite ends of the educational spectrum. The shortcomings of the former were emphasized by

the latter. I have experienced contrasting relationships between a student and her professor, and experienced the agonies of transforming from being academically passive into being force-marched into developing personal opinions and speaking out in front of the class. My own experiences have helped me tremendously in the interpretive analysis of my participants' lived experiences, and gave me certain advantages over others who don't share this experience. Secondly, I have always been interested in human rights, social justice, equality, and fairness. These interests and concerns found new expression when the Egyptian Revolution began in 2011. I felt responsible for making a contribution and having an effective role. I felt that translating activists' experiences into English would help them reach new audiences, and by doing so I would help them have their voices heard and documented. Thirdly, I was surprised to learn about the deadly clashes that broke out between Egypt's youth and the authorities. I began to wonder whether these young activists, who had gone through the disorienting dilemmas of unemployment, social exclusion, delayed marriage, and loss of personal autonomy, and who must have gone through different stages of questioning, planning collective actions, and participating in reflective discourse, would now be able to take control of their own learning and develop new skills that would enable them to break away from the rigidly teacher-centered Egyptian learning model. Finally, I am interested in exploring how students learn, transform, and develop, "the incidental learning which occurs as people engage in social action and emancipatory social struggle" (Foley, 1999).

In addition to the aforementioned experiences and events, I have other biases and assumptions that relate to the type of research at hand. I am biased towards the exploration of this subject through a qualitative method of inquiry because at a fundamental level I believe that reality is a projection of our inner being; it cannot be objectively defined, only subjectively

understood. In addition, a qualitative methodology enables the researcher to gain an in-depth understanding of the participants' frames of reference and uncover their interpretations of the meaning-making process, as suggested by Courtenay, Merriam & Reeves (1998).

Limitations of the Study

Evidence about human experience has inherent limitations compared with hard data about human behavior. Because experience is not directly observable, data about it depend on the participants' ability to reflectively discern aspects of their own experience and to effectively communicate their ideas through the symbols of language (Polkinghorne, 2005). Another limitation is also due to the fact that validation depends on readers, "who make the judgment about the plausibility of a knowledge claim based on the evidence and argument for the claim reported by the researcher" (Polkinghorne, 2007). Accordingly, the design and subsequent findings of the study are restrained by natural limitations pertaining to the subjective experiences and meanings which are not generalizable outside of the specific group and context under study; the aim of the study, however, is to provide a more universal description of the transformative learning and meaning making achievable by university student social activists in authoritarian societies in the digital age.

Chapter Four: Findings

The purpose of this chapter is to present the main findings of the study. First it presents the interviews, descriptions and discussions of the lived experiences of the study participants and the how they perceived the role of Web 2.0 tools in their experiences. Second, it filters those findings through a cross-theme analysis. The purpose of the cross-theme analysis is to compare commonalities in the experiences and perceptions of the five study participants and to answer the study's research questions. The findings are categorized into six main themes: 1) reasons for participation in social action; 2) reasons for using Web 2.0 applications; 3) Web 2.0 tools and street activism; 4) learning through the use of Web 2.0 applications; 5) learning in social action; and, 6) making meaning in the activist role. The themes reported in this section are drawn from the literature review, which was also used to structure the interview questions. Finally, the findings are related back to literature and the studies that were reviewed in chapter two.

Part One: The Interviews

This section presents the interviews; revealing the participants' stories at first hand. It provides a recreation of each story, adapted into English from the original Arabic, in order to present each participant as accurately as possible. In recreating the stories, I tried to minimize subjectivity by simply reporting their experiences about Egypt's 2011 revolution, how they lived them, what these experiences meant, the lasting value of the experiences, and how Web 2.0 influenced what was going on in Tahrir square. I inserted translated quotes from participants to help immerse the reader into the participants' stories. I also highlighted important aspects of the participants' lived experiences, which were informed by their personal and practical knowledge, and how they answered the interview questions. It is also important to mention that the

organization of the stories reflects the themes that emerged from comparisons among all data sources including literature, interview questions, and interview transcripts.

Islam Amin. Islam Amin is a 28-year-old student in his second year of a post-graduate program at the Higher Institute of Cinema in Cairo. He is an activist and has been using Web 2.0 applications such as Facebook, YouTube, and blogging sites since 2007. Islam learnt photography and photomontage to enable him to produce movies as what he calls a, "one man crew." Islam's first documentary is entitled *The meaning of a civil state in 5 minutes.* He was born in Alexandria to an Egyptian father and an Indian mother. I met Islam in a public café in one of Cairo's newly developed, comprehensive neighborhoods. He had a very calm, laid back attitude and willingly talked to me about himself and his experiences for more than three hours.

Reasons for participation in social action. When speaking about his reasons for getting involved in social action, Islam referred to both his upbringing and a sense of racism:

> My father never let me mingle or play in the street. I only saw people from behind our car widow. My mother was a Roman Catholic and converted to Islam. Half of my relatives are Christians and the other half are Muslims. I am part of the upper-middle class, although I wasn't part of this class all my life. At school, someone would tell me that his uncle is a judge or a police officer, while one of my uncles is a cook and the other is unemployed. I had a bit of an identity crisis. In Cairo, they tell me that I am from Alexandria; in Alexandria, they say that I am from Cairo; at home they tell me that I am a foreigner from India; and for Indians, I am not one of them. I always had a question in mind, who am I? We are in a society that tends to discriminate and classify. I had always been confused until I realized that, simply, I am all these things together. I don't have to apologize for it. I learned that there is discrimination and racism. I also learned that I

> shouldn't wait until the damage is done and that I should stand against corruption and injustice.

When speaking about how the social and economic structure in Egypt impacted his living conditions, Islam talked about an unfair hiring environment and a lack of adequate job opportunities:

> I definitely suffered social injustice. In my undergraduate degree, I received the second highest ranking among my graduating class, but because I didn't have any connections, I wasn't hired as a lecturer and I couldn't work in public TV. Here, you never get the job opportunity that you are qualified for and supposed to have. I entered a private university, which I paid for. I pay for medical services and I pay for all different services. I don't owe the government anything. So you would expect that I can, at least, be safe in the street. If I was part of a lower social class, I would have been suffering from different violations.

Islam was scared the first time he attempted to take a stand against the authorities, but he felt that it was the right thing to do. Later, at different sit-ins, marches, and demonstrations in January 2011, Islam was no longer scared of participation. He realized that he was not alone and there were many others who shared his beliefs and goals.

> When I saw on Facebook a worker slitting his wrist after a demonstration because his pension is not enough to feed his children, I realized that there was a catastrophe. When people reach the point of suicide, then we have a huge problem. I could get beaten to death by police like Khaled Said. It is not a case of poor workers whose rights I am defending. It is now me who is facing threats to my life.

Reasons for using Web 2.0 applications. The advent of Web 2.0 was an opportunity for Islam to both express his opinion and engage in social action.

> At first, I was using ICQ and MIRC, then I used messenger to talk to my friends and I was commenting on blogs. I tried to start my own blog, but it was not practical enough for me. There were too many details related to design. I wanted to write something that would be posted immediately. Facebook and Twitter share this function. In addition, they have great features including ease of use, circulation, and fast communication. I created a Facebook account, firstly, to connect with my friends, and then I started to make fun of my circumstances after graduation. Later, I started to make fun of the circumstances of the country and, in 2008, I started mocking and disputing the ruling system. In 2011, I started participating in different marches and protests, and have been to this day.

Blogs by Egyptian political activists had revealed various cases of fraud and police corruption. These blogs had a profound impact on Islam and eventually sparked his interest in politics and social issues.

> Blogs are God's gift to humanity; most of the blog posts by activists including Wael Abbas, Amr Ezzat, and Nawara Nigm shaped the youth minds. They formed a mainstream and created a strong impact.

In reflecting on the use of Web 2.0 tools and the Internet, Islam illustrated how these tools provide people in Egypt the opportunity to make comparisons, draw inferences, evaluate conditions, analyze facts and, most importantly, become critical thinkers:

> Internet and social media promoted critical thinking and the critical mind. They provide ample opportunities for Egyptians to make comparisons. For example, you can see the subway system of France and compare it to the one of Egypt. You can see that Obama is

> 40 years old, while Mubarak is 80. You can watch and read news in digital media and compare them to the forged ones in the government-run media. We haven't seen these things elsewhere before. But now we are given the opportunity to compare, disentangle, and dismantle all the facts.

Web 2.0 tools and street activism. From Islam's point of view, activism is firmly implanted in the hearts of the activists and originated from unbearable living conditions; the free space of social media networks, however, is essential to protect the existence of social activism and keep it alive when all other platforms become impassable:

> Social media encourages people to connect. There is no Facebook in the world like the Egyptian one. All people are fighting, commenting, and involved in a struggle because these feelings are not being discharged through political parties or associations. Facebook is more of an outlet than a catalyst or an initiator. The energy is there, but it needs a vent, and since the vent doesn't exist in political parties, or marches, or media, it will exist here because this is the only outlet.

Islam illustrated how social media makes people's reflections, ideas, and discourse public. This in turn creates ideological tension and, as a result, transforms into real action in the streets:

> Facebook helped Egyptians, for the first time, to see themselves in their debates and they were eager to transform these virtual debates into things in the real world. We were able to liberate the public sphere with our bodies after we did that online.

Islam provided examples of political gains achieved through the use of social media:

> We were able to accomplish many political gains through Facebook including judicial supervision of elections, and laws that would limit the powers of any elected president.

He emphasized that the power of social media networks lies in the existence of different, wide-ranging opinions, and in seeing situations and events through the eyes of others:

> The power of social media is in the presence of the other opinion; in the presence of representatives of the other opinion, which also led to the personification of social media.

Nonetheless, Islam perceived a limitation in the power of social media networks. He explained that street action has to coincide with online action to ensure a significant impact on any political or social system. He gave the example of the results of the 2012 constitutional referendum held in Egypt.

> Everyone on Facebook had a circle of followers, thinking that these are the only circles out there. We thought that we account for almost 70% of the weighted votes. We thought that and we would absolutely win. But then came the defeat. 77% were in favor of the MB (i.e. Muslim Brotherhood political party) and the Salafies. That was the first lesson. A lesson that made me join a political party because you need to be organized and work on the ground. The Internet and Facebook are not enough to mobilize people. There are places that don't have internet access, which we have to penetrate through parties and movements. If you stay online you will always bring about the same results. It is not smart to lock yourself in your room in front of a laptop. You have to be on the ground to raise the awareness of the public.

Learning through the use of Web 2.0 applications. Islam saw that the personal use of social media enabled him to acquire an individual self-identity by having a personal account on Twitter and a Facebook profile:

> This is considered a victory. In the past, the only thing that I was able to choose, which was reflective of my personality, is a sticker on a school-book.

Islam felt that now he had a voice:

> I created a Facebook account, firstly, to connect with my friends… then I started mocking and disputing the ruling system.

He noted that exposure to different ideas were made possible:

> I learned many political ideologies such as secularism, socialism, and democracy.

Islam saw that engaging in online interaction lead to openness to alternative point of views:

> I learned to say my opinion, or to consider the opposing opinion. To be humble enough to understand the opposing opinion. I learned to come in terms with how I see myself.

Learning in social action. Islam felt that the kinds of learning that he constructed during his involvement in social action have significantly altered his core beliefs about the world:

> I discovered that Egypt is not the Mother of the World as they used to teach us in schools and feed us similar ideas through their media. There are many other better countries. Having a long history is not an invaluable thing, there are other countries like the UAE that has a sexual assault law, but Egypt doesn't. My ideas transformed and a qualitative change occurred. Now there is a parallel view or a side of life that I haven't seen before. A side that is more refined, enlightened, and diversified.

Islam explained how his religious perceptions have changed:

> I became more rational. I was already a secularist, but after going through this experience, I believed more and more in secularism and the importance of the separation of religion and state. God exists, but we have to rationally study all religions and their interpretations. I am now trying to appreciate philosophy more than rituals and worships.

Tapping collective experience lead to careful assessment of arguments and how to arrive at a best perceived judgment:

> When I filmed my documentary *The meaning of a civil state in 5 minutes,* all my cast were men, to the point that a female colleague accused me of being anti-feminist. I realized that she has a valid point and accordingly women became part of all my movies that followed. I learned to respect women.

Islam analyzed the past and present and applied new understanding in planning for the future:

> What is happening now happened before, and will happen again. The cost of fighting against injustice is much less than the cost of living with injustice. Those who tolerate injustice for many years end up in civil war.

Islam developed new personal traits, such as overcoming fear, and the ability to dream and achieve:

> The knowledge acquired here, you may name it, the knowledge of the ability to change, the ability to dream, the ability to achieve. Protesting made me realize that I am not alone. I was amazed to see girls and women protesting with us, to see people that looked like me, and to see others who were wearing jalabiyah. I learned not to be afraid.

Making meaning in the activist role. When speaking about the role of an activist, Islam emphasized that an activist is someone legitimately exercising his right to regain his stolen rights. Principally, the role of the activist in Islam's views was to achieve social change and to take a stand against injustice.

> A political activist is someone who cares about absolute justice; he is against injustice, discrimination, and classification. He tries to act by the law to the best of his ability, and without any political or group affiliations. He is practical and has a unique perspective. He defends his own rights. He does something that he feels no one else would do because

> everyone else is waiting for the activist to do it, they are almost sacrificing him, and this is part of being an activist. He is someone that we turn to when we are desperate.

Islam saw that his role as an activist has no ending and what he has learned from his experiences are an eternal way of being:

> I will continue to use social media to spread civic ideas, to denounce and expose injustices and to promote women's and minority rights. I started to film movies to educate and raise the awareness of people through arts and culture. This is my responsibility and my way.

Mohamed Medhat. Mohamed Medhat is a 22-year-old student in his final year of studies in a Bachelor of Engineering program at Cairo University. During his first year of study he started participating in extracurricular activities that bridged the gap between education and the real world. These activities helped him become proactive, self-assured, and work well in a team. Coming from a religious family, Mohamed had a tutor help him recite and learn the Quran since he was a child. In 2009, he started participating in on-campus political action. He has been also using Web 2.0 applications such as Facebook, YouTube, and blogging sites since 2009. I enjoyed listening to Mohamed for almost two hours; he was a great storyteller, sharing his thoughts in an organized, assertive manner.

Reasons for participation in social action. In speaking about his reasons for participation in social and political action, Mohamed illustrated that a crisis of political, social, and economic conditions prompted him to deeply distrust the institutions managing the country, and induced him to make certain choices and take direct action on-campus:

> During the years 2009 and 2010, I personally saw wide electoral fraud starting from the state parliamentary elections to on-campus student associations' elections. When I

> became aware that a student revolt started at the heart of the university, I was very happy and I got involved on that day. We were violently dispersed by the security forces and since then it became obvious that the regime had displayed one out of its many different faces: security was stepped up and more fraudulent incidents were taking place.

It seems that a turning point occurred for Mohamed when he started questioning his existence:

> I started questioning if I am really living in this country or if it is just a place of birth. I started to think that I did not exist. I felt I didn't have a voice. I was just a Facebook account. Where was my voice?

Mohamed had this persistent feeling, which came with a revolt and a questioning of current structures:

> I was against the ruling regime, but I didn't know how we were supposed to topple the government to begin with, and even if we did, it still remained unclear how the reforms would take place, or which political road map will be followed in the post Mubarak era. So where do I stand or which political ideology do I adopt? At first, my criticism was based on the lack of democracy and on the power of a President who had been around for 30 years and was involved in corruption schemes. Later, it was ideologically based on human right violations, police brutality, and many other provocations practiced back then by the government.

Reasons for using Web 2.0 applications. Mohamed revealed that the way he used Web 2.0 technologies changed after the revolution:

> At first, I was only using the Internet to access the University forum and download lectures or send question to my instructors. After, I was asked by my friends to create a Facebook account. At that time, I didn't chat online with them because we used to talk

> over the phone and meet up to play football together. However, the way I used the Internet changed after the revolution. Now, I use YouTube to watch news, tutorials, and political debates. I use Facebook to write posts or read others' posts. To keep up on current events, I go to pages of certain people on my friends list. I know what each of my friends is interested in regarding academic, social, or political issues. I have about 15 Facebook friends whose posts and analysis of current events I am interested in reading. As for the rest of people on my friends list, I am less interested in reading what they write. I also use Facebook to read articles from online newspapers. I am also very interested in reading certain blogs.

Since the beginning of the revolution, Mohamed had been using social media for networking:

> If there is no Facebook, our political party will fall apart because the structure of the party has been built on Facebook.

Web 2.0 tools and street activism. From Mohamed's point of view, social media encourages offline activism:

> During one of our student activity meetings, we read on Twitter that some people were being beaten up at a sit-in. As usual I said I would go. One of my friends who wasn't involved in any political action decided to go with me. He got shot in the arm and from that day on he has been participating in the revolution. This was the first time he joined any form of protest. I think that he found success stories that some people were trying to kill. As a result, he decided to get involved and defend these stories even if he wasn't part of them. Strangely enough, I saw that people who joined us after the first 18 days of the revolution were more revolutionary than us, as if they had found a sudden awareness, like the moment when you switch on the light.

Learning through the use of Web 2.0 applications. While reflecting on the benefits of social media, Mohamed described how they serve as catalysts for reflecting critically on one's own as well as others' assumptions and ideologies, and how they cause change in these ideologies, ways of thinking, and beliefs:

> When I write something and someone comments on it with a question, it challenges my knowledge, and I start to think whether what I wrote is right or wrong, then I start to reassess it.

Mohamed saw that social media provide abundant free spaces:

> Social media provides ample opportunities for communicating with people and hearing different opinions.

Mohamed gave some examples of how he used social media to learn and acquire new knowledge:

> For example, in one of the posts, you may see a reference to an important book, and you look it up and read it. Or you may follow political science professors, who only write in scholarly journals, to read their comments on events. I started to develop a political opinion; the conditions for knowledge had increased. I started seeing powerful intellectual dialogues and rich comments on them. Now I have a tremendous source of information that enables me to make a meaningful contribution when I talk at political party meetings.

He felt that social media enhanced individuation and autonomy:

> I learned some aspects concerning my own freedom. Meaning, this is my Facebook account, I can write what I want on my wall or post any picture. Nobody else has that right. If you don't like what I wrote then let it go, there is a space for comments, you have

> the right to post a comment, but if I don't like your comment, I have the right to remove it or block any person that I don't like. Facebook gives me this opportunity.

Learning in social action. Mohamed is clear about the skills he developed by participating in the revolution:

> I became flexible. There could be differences, but I can manage these differences while they are actually happening. I learned how to read someone and understand where his reactions are coming from and why he is expressing himself in such a way.

He sought information from different resources to understand different political and economic systems in a global context. He critically reflected upon and examined the validity of his own assumptions and ideologies and those of others which, from his point of view, lead to growth and evolution:

> I started to attend seminars, read all articles, buy political books, or look for them online. I passed the Muslim Brotherhood (MB) stage and became an enlightened Islamist; I also surpassed and became a revolutionary socialist, and now I call myself social democratic. This is the evolution; it is an incomplete evolution. I learn something new every day. There are no constants.

Mohamed experienced a shift in his meaning perspectives:

> I was able to break many stereotypes. During the time I spent in Tahrir Street and union meetings I sat with people at different points on the political spectrum, which required that I read about them and break many stereotypes that I had.

He also experienced a shift in his core beliefs:

> My religious perception has transformed. I went from memorizing the Quran and being religious to seeing religion as a tool used by dictators to oppress the public. I am the same person but now I can criticize using religion as a tool in social and political struggles.

He felt that he will never revert to his former views:

> I have truly assessed my former beliefs and I don't think I can revert back to them, but I may acquire new things as this is what I arrived at so far.

Mohamed's participation in social action has transformed his social relations:

> In the past, all my friends were from the MB. This has entirely been broken. Now I know people from across the political spectrum, they became friends, and we work together in different movements and political parties.

Mohamed expressed that engagement in sit-ins and demonstrations induced an appreciation of societal and religious diversity:

> This is the first time I saw that many people are sharing my dream, boys and girls from all walks of life, among others those who wear the veil, and those who are unveiled, those with beards, those who wear jalabiyah, and those who wear t-shirts. I wanted to hug and kiss everyone I met; I was joyful that all these people share my goal.

Mohamed shared how he had started approaching problems differently:

> Now, when I see something that is not working in my street, I bring my friends and try to fix it. The point is to be proactive. To make a meaningful addition to your neighborhood or university, or community that can last until after you leave so you would make a difference in another student's life. If you do not interact, you don't exist.

Making meaning in the activist role. Mohamed emphasized that the role of an activist stems from a deep concern about the degradation of the material conditions of life, a sense of responsibility, and an approach for change and development:

> The idea is wider than politics; it is concerned with the public sphere. The idea of being proactive and changing the absurd political, economic, and social status. You are a part of this society and you have responsibilities towards it. You are supposed to make a meaningful addition that can last. The meaning of being human is interaction.

Mohamed noted that his experience helped him become true to himself and aware of the emotional and learning needs required to make his civic engagement more effective, including a sense of self and a social awareness:

> I realized that talk is easy. Meaning, you could appear on a TV program to talk about change and the revolution, but are you performing that role? I am incapable of getting poor people to understand what is the revolution is about or what I am working on and thinking of, it could be a disability that I have. To say that activists can be responsible for the future of the country is a false claim. In this current political scene neither our reading nor our education allows us to carry this function. I discovered that I still have a long way to go to construct a mature perspective of the world, but I will continue to learn.

Esraa Farouk. Esraa Farouk is a 19-year-old female student in her second year of study in a Bachelor of Political Sciences at Cairo University and a member of the student association. Esraa was still in primary school when she got involved in public labor related to the environment and development. Although Esraa is the youngest activist that I interviewed, she brought up serious arguments and eloquently articulated diverse views. She showed a lot of wisdom, as if her experiences had greatly aged her. She seemed to have strong convictions and

she had an aura of calmness that would force anyone to listen to her with respect and admiration. Esraa's family, like many Egyptian families, doesn't have any political affiliations. Her parents have been worried about her safety, but her father gave her the freedom to make her own choices. Despite this, her father still insists that she wear the hijab, even though she is no longer convinced about wearing it. Esraa has been using Web 2.0 applications such as Facebook, YouTube, and blogging sites since 2008.

Reasons for participation in social action. Three months after the revolution, Esraa switched her interests from environmental activism to political activism, participating in movements and protests. According to Esraa the reasons for her social and political involvement lies in the 2011 Revolution motto: "bread, freedom, and social justice:"

> It means that I'm able to feel safe walking in my own street, people in the streets are no longer hungry, and no one is being tortured in a police station. It also means that I have a voice; that my vote counts; and that I can get back my rights through the courts, not through other means. I very much believed in the Revolution. Every time I remember that I was watching TV on the 25th of January, I can't forgive myself. My non-participation in the beginning of the revolution is nothing less than a shortcoming from my side. I had to participate. I had to be more proactive.

Web 2.0 tools and street activism. From Esraa's point of view the sense of security, speed, and efficiency of social media tools encouraged offline activism:

> We agree on and plan for our student association meetings and future actions on Facebook. Sometimes we meet on Skype if there is violence in the street. After a while, Web 2.0 tools started to substitute for the physical world. Why would I go out to distribute flyers in the university if I can easily post an event on Facebook? The event

> will reach many more people and I will not put my safety in danger. An activist can be active online without being active in the street. Most current movements and parties are working online. Youth activists have been trying to acquire an effective role in the street but they don't have the money, and to some extent they don't have strong organizational skills. Even when they are in the street their efforts are dispersed. Social media networks serve as fast and safe tools for transferring the activists' messages and ideologies and providing them access to all sorts of information and knowledge.

Even though Esraa perceives the role Web 2.0 tools in the Revolution as influential and a force for democratization, she feels that these tools are not yet sufficient to make young activists popular in the streets:

> We became a closed community of like-minded people. We only talk to each other. We talk to people who are already convinced of the need for change. This is a big challenge that we are trying to deal with and solve in the student association. Although all of us have Facebook accounts, we try to be present in the physical space. Talking to someone face to face, making eye contact, and showing your body language is different than a post on a wall. People see us and feel that we are not merely virtual creatures.

Learning through the use of web 2.0 applications. According to Esraa, using social media encouraged her to test the validity of different perspectives, acquire knowledge, and raise both her awareness and others':

> People who use social media think differently. They have been trained to look for the right information, to be cautious about the validity of information, and to compare and contrast different information resources. I cannot think of deactivating my Facebook

> account. It means that there will be important things that I will not be able to know about. I will lose my contact with the outside world.

Esraa feels that social media encourages a culture of difference and diversity:

> When I talk to people who don't use social media I feel that they are living in a different country or a different world. Their source of information is different and the goal behind the information which they receive is different. Traditional media is unidirectional, shamelessly managed, and purposeful.

This culture of difference and diversity is prompted by the wide range of social interaction that social media provides:

> When I started interacting with people on Facebook, I started to feel that there is something wrong with me. I realized that the people who are willing to die have real reasons to do so. They believe in change. I saw that their basic demands including social justice, human dignity, and freedom are undeniably reasonable.

She is clear that using Web 2.0 tools enabled her to asses some former assumptions and make cross-cultural comparisons:

> I started to think that I would have received a better education if the system wasn't corrupt. I started to see the gap between our quality of living and the one of some foreign friends that I have. Differences in the relation between police and public, and between governments and citizens started floating to the surface. I saw different ideologies and political views that never existed during the past regime.

Esraa uses her Facebook page as a blog or a digital diary to record her opinions and link to news sites on a regular basis. When talking about what she learned from writing her opinions on different topics on Facebook, she stated:

> When I write, I organize my ideas and I feel that I can express and shout them out. I cannot protest in the street anymore because of the new restrictive protest law, so if I feel entirely oppressed and unable to talk; with time, I will start losing the meaning of things.

Esraa also became aware of the negative effects that social media may have on users such as social isolation and the spread of misinformation, but she felt that she learned how to become immune to such influences:

> I learned to be aware and be careful of what I post, which can negatively or positively influence other people. I also learned to not consider Facebook as a statistical indicator of the community, to not get too involved in details that sponsor wasting my efforts and my endurance capacities, and surely not to assume that other people are honest or post the truth.

Learning in social action. Esraa felt that she had developed many skills from participating in social action such as being proactive, idealistic, and fearless. She also developed other skills including collaboration, critical thinking, and ethical citizenship:

> The skills that I developed and my learning gains are the products of my experiences, and not from the formal education that I received in schools. I learned many things from social action, including how to form a field hospital, how to discern between the sound of bullets and tear gas, how to protect the girls from mass sexual assault during protesting, and how to organize a protest or a march. I also learned to dream. People are willing to give up their money, time, freedom, and life; they do that happily, because they have a dream. We have to protect this dream from dying. I learned to take initiatives and to strive. If I don't agree with a situation, I have to rise, take an action, and try to change it to the best of my abilities. I will fail, I will try again, and I will learn from my mistakes,

> and try again. The most important thing is that I do not wait for a leader or a savior, nor do I feel sorry for myself. Change starts from within; it starts on the inside and works its way out, not vice versa. I read about past revolutions and I saw that this happened before to many people around the world. Many people died the same way, and all dictators did the same thing. I started to understand the reaction of the Egyptian citizens. I now understand why they accepted this situation.

Esraa not only felt that she has learned practical and organizational skills, but that now she could use these skills to make meaningful contributions to her community:

> Most of us have different interests or viewpoints. However, I noticed that my words make a difference to younger students. I have many friends who are not involved in public labor but follow and think about what I write, specifically, when they tell me that they got into the Political Sciences program or became members in student associations because of me. Some of them also ask for my opinion about which movements to join. All this makes me feel that I am making a difference

Esraa also experienced a shift in her religious beliefs:

> I started breaking and criticizing many religious ideologies that I grew up with. I decided to take off the veil, but my father strongly refused and we still have problems as a consequence. I now see that God is forgiving and merciful. He doesn't look at what we are wearing or which religion my husband has, or at mechanical rituals created without conviction or love. I started to see how religion looks at me as a girl and as a human being. With time I went with what appeals to me most, the explication of religion is not the religion in itself, and the interpretation is open for anybody to participate in. I still

> have many question marks about religion but I think that, in this phase, I am more in harmony with religion than I have ever been.

Making meaning in the activist role. Esraa feels that the role of an activist is prompted by a deep sense of responsibility geared towards the greater good of one's community:

> An activist is a positive human being aiming to achieve certain goals, not for personal gains, but for the greater good. These goals overshadow his personal goals. He is ready to give up many things including his freedom, privacy, and life. Being a member of a political party provides a sense of belonging, a feeling that I really missed.

Esraa has committed herself to serve her community:

> I want to achieve self-sufficiency, for example, I want to grow all our vegetables, I don't want the ruling system to tell me one day that I cannot buy my food. I would like to make the community stronger so that no dictator would be able to do anything. It is a very big and difficult and unrealistic idea, but it makes life more bearable.

Esraa illustrated how she has been planning to continue using Web 2.0 technologies to strengthen her message:

> I will use social media to protect what's left of my small community and I will use it to keep the idea of the Revolution in the collective mind. Moreover, I will use it for cyber activism even if there is no action in the physical space to ensure that the new generations are aware of what happened, to know that the Revolution was the best thing that happened to this country, and to counter the effect of the controlled media on their minds. I will remind them of the rights that they don't have.

In her quest for change, Esraa realized the importance of having a strong network:

> To be able to face the world, I need a trusted network of family, relatives, and friends to bring me stability and support that will allow me to take risks and challenge anything, be it authority or corruption or even work pressure.

Sara Ramadan. Sara Ramadan is a 23-year-old female student in her second year of study in a Bachelor of Commerce program at Helwan University. When I met Sarah in a downtown public café she had her black hair tied in a ponytail, and she was full of energy and enthusiasm. I understood from Sara that she used to wear hijab. Now she doesn't, although her family doesn't know. Sarah said that, "It is like living with a double identity." She does not yet feel strong enough to confront her family, so she has to put on a veil before she returns home. Sarah's degree was not her first choice; she couldn't study Journalism, the program that she liked the most, because of high admissions criteria. She is passionate about writing, particularly writing people's stories, revealing their sufferings, and becoming their voice. She is an activist and has been using Web 2.0 applications such as Facebook, YouTube, Instagram, and blogging sites since 2008.

Reasons for participation in social action. When speaking about her reasons for getting involved in social action, Sara referred to rampant corruption everywhere and the poor livelihood of most Egyptians that had become intolerable in her eyes. These factors inspired her to become a member of the April 6 Youth Movement:

> I am a dreamer by nature; I believe that people should have rights and everything has to fall in its right place. I wonder why the world is full of shit. I am sorry for my language. There is a lot of brutality. If I have food to eat, why would I take your food? I cannot understand the logic of such actions. Every day I see shocking news about deadly accidents due to poor services or corruption, and the people that do these things and take

other people's rights are not being punished. I created a Facebook account to look for people from the April 6 Youth Movement. When I found out that they arrested protestors, including girls, I was angry, I went on Facebook to look for anyone who might know these girls or have any information about them and found two members of the April 6 Youth Movement and we all agreed to meet." I was eager to learn about them and their civic activities, and they were looking for students to recruit for the movement.

Reasons for using Web 2.0 applications. Besides her urge to track down members of the April 6 youth movement, Sara started using social media in 2008 to express her opinions about various social issues:

My parents are illiterate and therefore I had to teach myself many things and I was trying to do that through social media and the Internet. At first, I used to log in to Yahoo! chat rooms and online forums to write and express my opinions about social issues or whatever came to my mind. I am passionate about writing and I feel that transferring the real story is very important. Media is what influences people the most. What you say and how you say it makes a big difference in managing and directing public opinion.

Web 2.0 tools and street activism. Sara felt that the continuous existence of the movement depended greatly on the capabilities of Web 2.0 applications:

I use Facebook and blogging sites to promote the ideologies of the movement in order to broaden its base and recruit students for it. During the Revolution we used to post events such as the date and time of demonstrations, updates on demonstrations as they were happening, and the arrival of security forces. Social media allowed us to share news of an arrest. If you can use your cell phone to log in to Facebook or twitter and write that you are being arrested and if you can write the name of the police officer who is arresting

> you, you will be safe because the state security will be afraid to harm you. Social media networks such as Facebook, Twitter, and YouTube definitely had a vital role in the 2011 revolution. For example, YouTube helped us distribute the real stories with real pictures from the streets of Egypt in order to document and back up our claims. We used to videotape our marches and demonstrations and post them on YouTube. This helped us recruit more people, broadcast and promote our activities and ideologies, and maybe over time as more people follow our news, they will become convinced by our ideologies. Social media also helped us document any injustices in the streets, and connect geographically dispersed people. I also use social media to compare information, such as comparing between revolutions that occurred in other countries and comparing different political ideologies. Being involved in civic engagement encouraged me to use the Internet and social media in these ways; and equally, without the Internet, I cannot find the information I need.

Learning through the use of web 2.0 applications. According to Sara, using social media enabled her to record her thoughts, learn from others, reflect, acquire knowledge, share stories, facilitate connections among people, and make sense of things:

> I use Facebook to write my political ideologies, which allowed me to engage in different discourses and connect with like-minded people. I used to write articles for the movement; for instance, if I have to write about free education, I will use the social media and Internet to find out about other countries that have free education and how successful they are and to learn about the different educational services offered around the globe

Learning in social action. Sara generally felt that her involvement in social action resulted in expanding her awareness, experiencing self-empowerment, transforming her views

and beliefs, and gaining greater control of her life. Among the many skills that she developed is a democratic form of organization:

> A questionnaire was created on the Khaled Said Facebook page to choose a protest day;75% of us chose Tuesday, January 25.

Sara also became more open to alternative points of views, and to negotiate her own values, meanings, and purpose:

> I used to believe in Nasserism (an Arab nationalist ideology); I thought that it was closer to social justice and that the liberal ideologies were unfair to many people. It was a kind of conflict between the members of the 6 April movement and I, so they invited me to attend their seminars and events and I agreed. Thank god that this was in the past and that one's thinking evolves.

She learned to collaborate across social networks and connect globally to foreign countries in order to learn from other experiences:

> We used to videotape our marches and demonstrations and post them on YouTube. This helped us recruit more people, broadcast and promote our activities and ideologies. We looked on Facebook at how Tunis did it and how they resisted the violence of the police, and we organized ourselves accordingly.

Teamwork is one of the skills that she acquired:

> We divided ourselves into groups; each group had a leader and a mission. For example we had a Death Group. The people in this group were going to turn themselves to police to protect the rest of us if something happened.

Her experience enabled her to achieve greater autonomy in thinking:

> I learned that there is no matter of fact about anything in this world; anything can change at any time if we decide to change it. No one can silence a human being or prevents her from doing something that she wants. We should not wait for authorities to offer us a substitute; we should be proactive and provide solutions. I now understand that theory and practice are two different things. If you want to know the truth you have to connect to people and you have to connect to those who can make a change, the marginalized unprivileged people. If you know how these people think, you may be able to transform this country.

She also learned to appreciate societal diversity:

> Poor people are the most important factor in any equation; without these people nothing would have happened or have changed. I never thought that these people will lead us in the marches and take in the bullets instead of us.

Making meaning in the activist role. To Sara, an activist is:

> The one who lights the way for other people. The one who sees that people deserve better. He can see further than others. Activists have different endurance for activism, someone might stop after one year, another can continue forever. Many of them sacrificed a lot and others took advantage of the situation and joined the regime; but these people I pity.

Although many activists share a sense of defeat, they all have a great orientation toward the future. Sara stated that:

> I will continue doing what I used to do since 2008, to denounce and expose injustices and transfer real stories to people.

Although she noted that these experiences have aged her, she hasn't lost hope:

We are going through a series of victories and defeats, which are draining. After defeats I don't have the same energy as before; a lot of my friends are now imprisoned. First we were portrayed as heroes, but now we are seen as Western agents. We haven't lost the hope, we will continue, and one day, people will realize that they made a mistake. People deserve better.

Mina Youssef. Mina Youssef is a 22-year-old student in his first year of study in a Bachelor of Arts program at the Higher Institute of Cinema in Cairo. He started using Web 2.0 applications such as Facebook YouTube, Instagram, and blogging sites in 2008. In 2008, Mina also became a member of an Ultras sports fan group. Ultras are a highly organized group of European football supporters who set off fireworks, chant, and sometimes raise havoc. In Egypt, in 2007, the fans of Egypt's biggest club, Ahly, formed an Ultras division. Egypt's Ultras repeatedly clashed with and developed a hatred for the state police in the years leading to the 2011 Revolution. As a result, Mina acquired experience fighting with the police before getting involved in any social action. A few weeks before the revolution, on January 1, 2011, Mina participated for the first time in a demonstration held by Christians angry about a church attack in Egypt. From that day forward, he started denouncing the injustices and humiliations carried out by the authorities and participating in the many political demonstrations that took place around the country.

Reasons for participation in social action. When speaking about the reasons that sparked his interest in political and social action, Mina referred to his discontentment with the police brutality and misconduct he and other Ultras members suffered from:

> As a member of the Ultras sports fan group, I suffered a lot from the Security Forces. These forces arrested many of us. In 2010, during Mubarak's regime, any youth gathering was prohibited even though our gathering was mainly to support our football team and

> had nothing to do with politics. There were many violent clashes between us and the police. The first time I protested in one of the marches was because I was told that some terrorists bombed my church. During the march the police forces started arresting us. I asked myself, why are they acting this way if they haven't done it themselves? From that moment on I participated in all the marches that came after.

Reasons for using Web 2.0 applications. Mina noted that he was using social media amid his civic engagement to reveal the violent clashes between security forces and protestors:

> In 2006, I heard about Facebook and I created an account. At that time, I only used it to share songs. I was an airhead. But when I joined the Ultras group, my conversations shifted towards my football club and its group page. Later, came the incident of the attack on one of the Coptic churches in Alexandria. I started sharing news about the demonstrations in Alexandria and the news of other demonstrations held in another church close to where I live. This was the first demonstration that I participated in.

During the Revolution, Mina started using YouTube to transfer the demonstrations and sit-ins that were held on the ground to the virtual world:

> YouTube helped me distribute the real stories with real pictures from the streets of Egypt in order to document the revolution and back up our claims

Web 2.0 tools and street activism. Mina felt that Web 2.0 applications including social media, Twitter, and YouTube created an environment conducive to collective action and activism. He thought that these applications could increase people's motivation or make them more likely to participate in social action:

> Often times I had tried to get on with my normal life and detach from politics. However, whenever I read a post or a piece of news on Facebook, I found myself commenting on or

sharing the news and eventually I would get involved again in the ongoing events beyond the online world.

Learning through the use of web 2.0 applications. According to Mina, using social media enabled him to acquire knowledge:

> I sought information to gain enough knowledge on different political and social issues locally and globally. I also used Facebook to learn about demonstration dates and locations as well as to read the news.

Mina also noted that he used social media for learning and self-improvement:

> After a few months of the revolution, we tried to use social media to develop ourselves and learn from our mistakes and avoid repeating them.

Learning in social action. Mina is clear that his involvement in social action resulted in expanding his awareness, transforming his perspectives, and changing his judgements about people:

> I started seeing everything from a wider perspective than before. My worldviews have changed. My personality has changed 180 degrees. Since then my perspective changed completely towards society and the world. I transformed from being a simple-minded, superficial person or an airhead into being someone who cares about the greater good of his country. I also acquired enough experience to be able to understand and judge people based on their behavior.

Mina felt that working together with other activists enabled him to gain collaborative teamwork skills and use them to contribute meaningfully to his community:

> I don't know what to do when I am alone. Not because I can't do anything, but because I lack organization. I knew that I needed to join a political party to be able to do bigger and

> more significant things. I joined a movement called the Lotus Revolution, which greatly influenced me. Through the movement, I attended many seminars held by other activists. I was able to acquire the knowledge and experience I needed and transfer that to my ghetto to help raise the awareness of my neighbors about the constitution and their basic rights.

Mina learned to weigh evidence, seek understanding, test the validity of different perspectives, and transform his own perspectives:

> At the beginning, I protested because I was told that terrorists bombed my church. However, when the police forces started arresting us, I had to ask myself many questions. For example, why are the police forces arresting us and acting with violence if they haven't bombed the church themselves? From that moment my views have transformed and I participated in all the marches that came after.

Mina learned to appreciate religious diversity:

> After the revolution, I didn't feel that I am Christian or a minority. In Tahrir square, all people were the same, I didn't know which religion they have, what makes a difference is that we are all there for the same goal.

He also experienced a shift in his social relations:

> In the past, the main factors in my relations were my religion, my church, and my Christian friends. Now, I see that people are all the same.

His experience was fundamental to promoting autonomy and gaining a distinct voice:

> I learned to speak out. I grew up not knowing how to express my opinion. Now, I let my voice be heard and I try to explain to others my views openly and unreservedly without any fear.

Making meaning in the activist role. Mina appreciated and embraced a collective rather than an individual concept of responsibility and philanthropy:

> I always hate to be called a political activist. As a member of an Ultras sports fan group, one of the principles of the group is self-denial, if I do something for the group, I won't say that I did it, but I would say that the group did it. That's why I am not comfortable with the title. I don't know if the things I do are considered political activism. I do these things because I believe in them. I believe that I should help people become aware of the principles of the revolution and be aware of their rights. To me, revolution is not demonstrations; it is a way of living.

Mina noted that his experiences helped him contribute meaningfully to his community:

> We created a campaign, *Alive but not Living*, to help people claim their rights. We would mobilize and organize marches for them, film them and broadcast the movie on TV, and we would organize press conferences in ghettos and stream the film on YouTube.

Mina admitted, however, that now needs to take a break and attend to himself for a while:

> Two weeks ago, I took the decision to stop playing politics, I don't know if it is because I feel defeat or despair, but I feel that I lost three years of my life without achieving any significant outcome. I will attend first to my life and my future, then if something similar to January 25 happens again, I will for sure participate; I have a dream that one day this country will rise up and change.

Part Two: A Synthesized Interpretive Analysis of the Findings

This section presents the findings through a cross-theme analysis. The purpose is to compare commonalities in the experiences and perceptions of the five study participants and to

answer the research questions. In the light of the five complete interviews, the following six themes emerged:

1. Reasons for participation in social action;
2. Reasons for using Web 2.0 applications;
3. Web 2.0 tools and street activism;
4. Learning through the use of Web 2.0 applications;
5. Learning in social action; and
6. Making meaning in the activist role

Themes one and two do not directly answer any of my three research questions; they set the stage and provide context, however, and add insights and explanations concerning the study participants' subsequent actions. Theme three answers the research question: According to the student activists' perceptions, does the use of Web 2.0 tools encourage offline urban space activism? Theme four answers part of the research question: According to these students' perceptions, what was the nature of learning occurring as they engaged in social action in Web 2.0? Theme five answers the same research question in its entirety: According to these students' perceptions, what was the nature of learning occurring as they engaged in social action in both Web 2.0 and in real world urban spaces? Finally, theme six answers the research question: After the 2011 Egyptian revolution, what meaning did the student activists derive from their new role in society?

Each of these six themes emerged from carefully developed categories that contained clusters of systematically arranged coded data. The coding process took three consecutive attempts (i.e. cycles) of recoding, refining, and managing the significant features of the raw data. In the following section, I will present each theme separately. Under each theme I will first

illustrate the major categories with their subsumed codes and provide corresponding quotes, taken directly from my translated raw data, to exemplify each of the final codes. Second, I will provide a summary of the categories of findings that lead to the development of the more general, higher-level themes, and answer my research questions using these explanations and findings. Finally, I will relate my findings to extant literature and similar studies.

Theme One: Reasons for Participation in Social Action. Throughout the interviews, participants mentioned that they decided to participate in social action after going through variations of several phases of dissatisfaction. Some participants experienced feelings of discrimination. One participant said, “We are in a society that tends to discriminate and classify.” Another felt uncertain about his existence, “I always had a question in mind, who am I?” Some participants felt distrust towards the ruling system, “The regime had displayed one out of its many different faces: security was stepped up and more fraudulent incidents were taking place.” Most participants felt discontent with economic conditions; one participant explained, “I know that when I graduate I will not find a job, I will be unemployed for years, then I will have no choice but to leave the country to find a job.” These quotes indicate feelings of discrimination, uncertainty, distrust and discontentment towards the political and economic situation, which is an important category of codes under the first theme, and the first step that led the study participants to become involved in social action.

Following this first reflection, participants started to assess their current situation. One participant stated, “I was against the ruling regime, but I didn’t know how we were supposed to topple the government to begin with, and even if we did, it still remained unclear how the reforms would take place, or which political road map will be followed in the post Mubarak era.” Another participant said, “At first, my criticism was based on the lack of democracy and

corruption schemes. Later, it was ideologically based on human right violations, police brutality, and many other provocations practiced back then by the government." Statements like these showed the participants' critical assessment of the situation, which is an important category under the first theme, and the second step that led them to participate in social action.

Some participants subsequently perceived a severe negative impact on their lives to the extent that they felt the situation was unbearable and sometimes life-threatening. One participant stated, "The world cannot continue the same way. I don't want anything to break me; neither the system nor anybody." Another participant said, "First they killed Khaled and tomorrow they might kill me. It is now me who is facing threats to my life." Such statements were another important category under the first theme, showed one of the driving forces behind the participants' decision, and constituted the third step that led them to participate in social action.

When participants felt that they were not the only ones who went through the aforementioned steps of dissatisfaction, assessments, and being at risk, they realized that they were not isolated. One participant said, "I realized that I'm not alone and there are many others who shared my discontentment." Similarly, one participant stated, "When my brother told me that there were marches in our street, I didn't believe him, but when I saw large numbers of people walking towards us, I immediately joined them without even thinking." Another participant added, "When I became aware that a student revolt started at the heart of the university, I was very happy, and I got involved on that day." The realization that they belonged to a group or a community is another important category under this theme, in addition to being an important fourth step toward taking social action.

Additionally, some participants started to question their role in Egyptian society and felt responsible for taking a stand against injustice and joining others who were already engaged.

One participant stated, “My non-participation in the beginning of the revolution is nothing less than a shortcoming from my side. I had to participate. I had to be more proactive.” Another participant stated, “When I saw this horrific scene, I was very angry (. . .) I couldn’t believe what I saw; I couldn’t imagine that you beat up a girl regardless of what she may have done; I joined them in their march, as any man would normally do.” These statements are another important category under this first theme and constituted the fifth step towards taking action.

Finally, and as a result of all the aforementioned steps, participants believed that social activism was the best plan of action to improve their living conditions and claim their rights. One participant said, “I was scared the first time I attempted to take a stand against authorities, but I felt that it was the only right thing to do.” Similarly, one participant stated, “I will try to bring back my rights, to the best of my abilities, and I will continue this way in life.” Another participant explained the rationale behind getting involved in social action by stating, “My reasons lie in the 2011 Revolution motto: bread, freedom, and social justice.” This is the last category in this theme, and is the final step towards taking social action.

To summarize, the reasons for participating in social action were explained by participants as a series of six steps: 1) feelings of dissatisfaction; 2) assessment of their current conditions; 3) finding the situation unbearable and sometimes life-threatening; 4) recognition that they are not isolated; 5) questioning one’s role and experiencing feelings of guilt and responsibility; and 6) taking action (i.e. participating in social action).

The literature review demonstrated different drivers that led to Egypt’s 2011 Revolution. This research study provides similar findings. The student activists’ feelings of dissatisfaction are in line with authors who explain that, “the intense and tangible sense of injustice, a crisis of living conditions that make everyday life unbearable” (Castells, 2012), lack of personal safety, “a

rampant unemployment rate" (Parks, 2011), and the right to life, liberty and the pursuit of happiness are crucial to understanding why young people acted the way they did during the revolution (Elbendary, 2011; Wahba, 2011; Green, 2011).

The participants' feelings of deep dissatisfaction led them to critically assess the aforementioned unbearable living conditions. Similar findings were reported by many authors, including Lesch (2011), who highlighted growing concern about and direct experience of police brutality by young people from all walks of life, which prepared the ground for the January 25 Revolution (Lesch, 2011). For example, Wael Ghonim, an accidental activist and allegedly a key organizer of the protests stated, "Today they killed Khaled. If I don't act for his sake, tomorrow they will kill me" (as cited in Vargas, 2012). The process of assessment that many young people went through led them to conclude that these unbearable conditions were severe and life-threatening, and presented enough rational reasons for them to participate in social action.

In a fashion similar to the fourth step explained by the participants, when they felt that they were not alone or isolated, Castells (2012) explains that sharing emotions, such as fear and anger, as well as identifying with others may induce collective action. This is especially true when people are faced with a "disorienting dilemma" (Mezirow, 1997; 2000), and this dilemma causes people go through stages of questioning, critical reflection, reevaluating assumptions about the world, realizing that they are not alone and that others have engaged in this process.

The participants felt guilty and responsible for not immediately taking action to counter the unbearable living conditions that they were facing. At the same time, they had enough reasons affirming their need to take action to get them closer to the fulfillment of a moral feeling, and take on a more active role. As noted in chapter two, one of the founders of the 6 April Youth Movement, Asmaa Mahfouz, posted a vlog (blog containing video) on her Facebook page eight

days before the revolution, which quickly went viral. She declared, “Four Egyptians set themselves on fire. People, have some shame! I, a girl, am going down to Tahrir Square, and I will stand alone. Don’t think you can be safe anymore. Come down with us and demand your rights, my rights, your family’s rights. If you stay home, you deserve all that’s being done to you, and you will be guilty before your nation and your people. I am going down on January 25th and will say no to corruption, no to this regime.” This vlog came to be known throughout the Middle East and was known as, “The vlog that helped spark the revolution” (as cited in Castells, 2012). As a result of this and many more calls to action that spread through social networks, tens of thousands of Egyptians, converged in Tahrir square, feeling responsible and demanding their rights, and transformed the square into a revolutionary space.

In addition to being in line with similar studies, what is significant about this study is that it sheds the light on the different emotional phases that the participants went through before they made a decision to participate in social action. Particularly, this study helped in breaking down and recognizing six different steps that the participants went through and resulted in a meaning becoming strong enough for them to get involved in social action. As noted in chapter two, Mezirow (2000) states that one’s decision to act on reflective insight may result in immediate action, delayed action, or reasoned reaffirmation of an existing pattern of action. This study breaks down and recognizes the six different steps that the participants went through that resulted in a meaning becoming strong enough for them to get involved in social activism.

Theme Two: Reasons for Using Web 2.0 Applications. Throughout the interviews participants described a variety of reasons for using Web 2.0 applications. One main and frequently reoccurring reason was communication. One student activist explained how he used Facebook to connect with friends, “I was asked by my friends to create a Facebook account.”

Another participant explained how she used Facebook to network with like-minded activists, "When I found out that the police arrested protestors, including girls, I was angry, I went on Facebook to look for anyone who might know these girls or have any information about them and found two members of the April 6 Youth Movement and we all agreed to meet." One participant explained how her political movement used Web 2.0 tools to meet in a safer environment, "Sometimes we meet on Skype if there is violence in the street." Another participant explained how he used Web 2.0 tools to inform themselves and others of events, "I used Facebook to post events and read others' posts." Statements like these demonstrate the first important category under the second theme and show that the study participants depended greatly on Web 2.0 tools to communicate.

Participants often expressed that the key reason for using social media tools was to have a voice. One participant explained how he was able to share his ideas freely, "I started to make fun of my circumstances after graduation. Later, I started to make fun of the circumstances of the country and, in 2008, I started mocking and disputing the ruling system." Similarly, one participant stated, "I used to log in to Yahoo! chat rooms and online forums to write and express my opinions about social issues or whatever came to my mind." Additionally, one participant explained how many activists, himself included, used Web 2.0 tools to promote their ideas, "Social media networks serve as fast and safe tools for transferring the activists' messages and ideologies." Another participant stated, "I can write what I want on my wall… I feel shy when dealing socially with people, but when I am alone with the keyboard, it is something different." These quotes are examples of how participants used Web 2.0 applications to establish a voice by expressing their opinions and spreading them freely to different communities and networks, which is another important category of codes under the second theme.

Another reason for the participants' use of Web 2.0 tools was to stay up to date on current news and events. They all indicated that these tools provided easy access to all sorts of public information and knowledge in one place. One participant stated, "I use YouTube to watch news, tutorials, and political debates." Another participant said, "I also use Facebook to read articles from online newspapers." Statements like these show how participants depended on social media tools to stay current on events, which is another category of codes under the second theme.

Having access to the same event via different online sources enabled the student activists to make comparisons and evaluate their sources in order to choose the most credible ones. One Participant stated, "People who use social media are different; they have been trained to look for the right information, to be cautious about the validity of information, and to compare and contrast different information resources." Another participant described that having access to different information sources was empowering, "The opportunity to hear different opinions, you see a reference to an important book in a post so you look for it and read it, you follow political science professors, who only write in scholarly journals, to read their comments on events. I started seeing powerful intellectual dialogues and the rich comments that follow. . . Now I have a tremendous source of information that enables me to make a meaningful contribution when I talk at political party meetings." Such statements demonstrate how the participants used Web 2.0 tools to learn about, compare, and choose the most credible source of information; another important category under the second theme.

Finally, participants used Web 2.0 applications to participate in and plan for social action. One participant explained how she used Facebook to organize political events, "Why would I go out to distribute flyers in the university if I can easily post an event on Facebook? The event will reach many more people and I will not put my safety in danger." Another participant used

YouTube to raise public awareness about what was happening in the streets, “YouTube helped me distribute the real stories with real pictures from the streets of Egypt in order to document the revolution and back up our claims.” Some participants concluded that on many occasions Web 2.0 tools replaced the physical world with a virtual world that was much safer, fast-paced, more efficient, and easier to manipulate. One participant mentioned that an activist can acquire an online political role, “An activist can be active online. Youth activists have been trying to acquire an effective role in the street but they don’t have the money, and to some extent they don’t have strong organizational skills.” Another participant explained that online activism can gradually make an impact, “Even if we cannot protest in streets, we can still protest on Facebook and hash-tag it on Twitter. Even if it will not make an impact at this time, I see that these are accumulations for things that are forthcoming in the future.” These quotes represent the final major category of codes under the second theme, and refer to how the participants used Web 2.0 tools to plan for and participate in social action.

In summary, from the participants’ perspectives, Web 2.0 applications were used for the following five reasons: 1) communication; 2) establishing a voice; 3) keeping up with current events; 4) learning about and comparing different sources of information; and 5) participating in and planning social action.

Based on my literature review, the aforementioned reasons are in line with contemporary empirical studies that suggest that Web 2.0 tools, specifically Social Media Networks (SMNs), are employed by Web 2.0 users because of the rich opportunities provided for connecting individuals and groups (Ellison, 2007), networking, collaboration (Bryant, 2006; Sharma, Joshi, & Sharma, 2016),resource sharing, social influence (Sharma, Joshi, & Sharma, 2016), coordination and mobilization of grassroots movements (Herrera, 2012; Faris, 2013; Perez,

2013), developing public awareness, propelling real-life protests, and incorporating Web 2.0, alongside other forces, as a tool for social change (McCaughey & Ayres, 2003; Glaser, 2006).

Throughout the interviews participants mentioned that they used Web 2.0 applications for a variety of reasons. One main and frequently reoccurring reason was to communicate, connect with friends, network with like-minded activists, and meet in a safer environment. Contemporary research suggests that there are many functions that make Web 2.0 social media tools desirable for dissidents in authoritarian systems. Particularly, social media tools facilitate many-to-many communication, allowing individuals to share information instantly with large numbers of people, and increase the geographic and spatial reach of this information—news of arrest, the date and time of a demonstration, or the impending arrival of security forces (Faris, 2013).

Many participants indicated that they used social media tools to promote their ideas freely and to find a voice. As shown in chapter one, many media reports and testimonies by activists, bloggers, and journalists claimed that Egyptians are not free to speak out. Journalist Magedi Hussien, editor-in-chief of the censored Egyptian Al Shaab Newspaper, stated that before the revolution genuine media freedom was only possible online ("Testimonies," 2011). As a result, many activists started looking for new means of expression including blogs, forums, and social media networks.

Some participants also reported their use of these venues to keep up with current events both during and after the 2011 Revolution, and to learn about and compare different sources of information in order to choose the most credible ones. As noted in chapter two, Twitter was used by Egyptian activists as a truth telling tool to contest information disseminated and controlled by authorities during the revolution (Nunns, 2001). Facebook was used for similar reasons by one of the most popular Egyptian activists and bloggers @Sandmonkey, or Mohamed Salam,

"Facebook is a fantastic way to share information, post links or organize events; if you use Facebook to do that, you can use it also to organize a demonstration." (as cited in Rodriguez, 2012).

Most participants reported using Web 2.0 applications to participate in and plan social action. Similarly, in the literature review, several studies showed that activists often create their own media in order to counter hegemonic messages, misinformation, and negative portrayals of activism typical in the mainstream press (Harlow & Harp, 2012; Herrera, 2012; Faris, 2013; Castells, 2012; Perez, 2013). For example, Alaa Abdel Fattah, an Egyptian blogger, software developer, and a political activist, stated that Facebook, blogs, forums, independent news pages, and the official web pages of political groups are venues that were used to actively organize protests in Egypt (as cited in Glaser, 2006).

This study's significant finding is that on many occasions all participants perceived their virtual presence in Web 2.0 tools as a substitute for the physical world, as well as the only outlet available for them to engage in social activism when their very presence in the streets posed a threat to their lives.

Theme Three: Web 2.0 Tools and Street Activism. Theme three, which is Web 2.0 tools and street activism, was used to answer the following research question: According to student's perceptions, does the use of Web 2.0 tools encourage offline urban space activism? This question addresses the dynamics between online and offline activism and describes how what was discussed in Web 2.0 spaces influenced what happened in the streets of Egypt.

According to the participants' perceptions, the impact of online activism on offline activism was twofold: 1) positive impact; and 2) negative impact:

Positive Impact. Most participants explained that their use of Web 2.0 tools, including YouTube and Blogs, had a positive impact in terms of acquiring knowledge and sparking their interest in social and political action. One participant explained, "Blogs are God's gift to humanity, most of the blog posts by activists including Wael Abbas… shaped the youth minds." Another participant added, "Blogs formed a mainstream." These statements show the positive potential of online social action to spark the interest of the participant in social and political action, which is an important category under the third theme.

Some participants explained that documenting and sharing facts through Web 2.0 tools helped them and others assess their former assumptions regarding cases of fraud and corruption and, as a result, recruit more youth activists, "YouTube helped us distribute the real stories with real pictures from the streets of Egypt in order to document and back up our claims." One participant stated, "We used to videotape our marches and demonstrations and post them on YouTube. This helped us recruit more people, broadcast and promote our activities and ideologies, and maybe overtime as more people follow our news, they will become convinced by our ideologies." Statements like these show how Web 2.0 tools helped in recruiting more activists, another important category under the third theme.

Another participant explained how Web 2.0 tools can change people's behavior by encouraging them to participate in social action, "During one of our student activity meetings, we read on Twitter that some people were being beaten up at a sit-in. One of my friends who wasn't involved in any political action decided to go with me. He got shot in the arm and from that day on he has been participating in the revolution." Another participant added, "Often times I had tried to get on with my normal life and detach from politics. However, whenever I read a post or a piece of news on Facebook, I found myself commenting on or sharing the news and

eventually I would get involved again in the ongoing events beyond the online world." Such quotes show the perceived positive impact of online social action on people's behavior, which is an important category under the third theme.

Another important perceived positive impact of online social activism is that the tension it created online often leads to street action. One participant explained how this ideological tension was transferred to the street, "Facebook helped Egyptians, for the first time, to see themselves in their debates and they were eager to transform these virtual debates into things in the real world. We were able to liberate the public sphere with our bodies after we did that online." These statements highlight another important category under the third theme by explaining how online ideological tension led to street action.

Finally, most participants saw that Web 2.0 tools both protected the existence of and provided a longer life-cycle for their social movements. One participant explained, "Facebook is more of an outlet than a catalyst or an initiator. The energy is there, but it needs a vent, and since the vent doesn't exist in political parties, or marches, or media, it will exist here [social media] because this is the only outlet." Another participant added, "If there is no Facebook, our political party will fall apart because the structure of the party has been built on Facebook." These statements show the importance of Web 2.0 tools in protecting the existence of social movements, which is another important category under the third theme, and related to the positive impact of online social action using Web 2.0 tools.

Based on my literature review, the role of Web 2.0 tools including Facebook, YouTube, and Twitter in encouraging activism has been a major topic of debate in the social sciences. During the Tunisian and Egyptian revolutions, however, social media tools were clearly used to

recruit more protestors, share events and demonstrations information, as well as to index information about the revolution to the world (Faris, 2013; Castells 2012).

The dynamic between online and offline activism perceived by the study participants resonates with some authors (Faris, 2013; Castells 2012; Herrera, 2012; Perez, 2013). All participants reported that activities conducted online encouraged and supported activities on the ground, including documenting and sharing facts and real images on Web 2.0 applications, recruiting activists through Web 2.0 tools, modifying people's feelings and behavior by exposing facts and information that made them more susceptible to join the activists, creating tension through online discourse, and transferring this tension to the street. These findings support the results of a cross-cultural study (Harlow & Harp 2012) that examined how activists in the United States and Latin America perceived the relationship between online and offline activism. The results of this study showed that the majority of participants saw social media sites as an essential part of activism in the United States and Latin America, and indicated that online activism led to offline activism (Harlow & Harp 2012). In another study conducted at a large southeastern public university in the United States, it was also found that students use social media to facilitate offline participation in activist causes because online interactions present a "safe" place to begin their involvement (Taha, Hastings, & Minei, 2015).

Some participants reported that the major role of Web 2.0 during the Egyptian revolution was to protect the existence of their social movements. For example, one participant saw that without Facebook the structure of his political party would crumble. The perceived potential of Web 2.0 tools in supporting the endurance of existing social movements is in line with Castells (2012) who advocated that, "digital social networks create the conditions for a form of shared practice that allows a leaderless movement to survive, coordinate, and expand." By the same

token, Egyptian blogger Salma El Daly explained how she used social media to maintain communication among the people within the movement and with society at large in order to help the revolution endure and continue, “Twitter and Facebook are the ways we keep the momentum going. We campaign there.” (as cited in Rodriguez, 2012). Similarly, Castells (2012) claims that the Internet protects social movements against the repression of their liberated physical spaces by maintaining communication among the people within the movement and with society at large.

The participants’ perceptions of the positive impact of online social action on changing people’s behavior and making them more likely to participate in social action is also in line with Faris (2013), who explains that the exchange of political information through social media networks may lead to widespread and sudden change in collective attitudes, beliefs and behavior.

Negative Impact. The impact of Web 2.0 tools on street activism is not universally positive; most participants agreed that they thought they had created stronger ties with other Egyptians in the streets. They also found that they had no significant impact on the majority of the population outside of social media circles. One participant stated, “We became a closed community of like-minded people. We only talk to each other. We talk to people who are already convinced of the need for change.” These quotes demonstrate how participants noticed that their online social action created closed communities of like-minded people, which is an important category under the third theme.

Most participants also shared that they suffered under the delusion that their debates in social media accurately reflected the debates happening behind closed doors or in the streets. One participant explained, “Everyone on Facebook had a circle of followers, thinking that these are the only circles out there. We thought that we account for almost 70% of the weighted votes… but 77% were in favor of the MB (the Muslim Brotherhood political party) and the

Salafies. That was the first lesson." These statements show another important category under the third theme by explaining how perceived social action through Web 2.0 tools provided misleading assumptions about offline power and impact.

Moreover, some participants reported that on certain occasions online activism had no impact on street activism at all. One participant simply explained that Web 2.0 tools cannot make an impact on those who don't use them, "There are places that don't have internet access, which we have to penetrate through parties and movements." Another participant explained that street action has to coincide with online action to ensure a significant impact on any political or social system, "It is not smart to lock yourself in your room in front of a laptop. Sometimes, you have to be on the ground to raise the awareness of the public." Such statements show the perceived lack of impact of Web 2.0 tools on street activism and the idea that having a balance between online and street social action is important, which represents the last category under the third theme.

According to my research such perceptions are partially in line with Malcolm Gladwell (2010), who argues that social media connections only promote weak ties. However, not all participants supported Gladwell's claims that online activists merely support online events (e.g., 'liking' a Facebook page) without participating in street activism.

Most participants perceived a limitation in the power of social media networks and agreed that street action has to coincide with online action to ensure a significant impact on any political or social system. These findings support Shirky (2011) and Castells (2012) research, which finds that social media tools alone cannot replace real-world action but are a way to coordinate it.

To summarize, based on the participants' perceptions the dynamics between online social action and street activism were twofold; 1) positive impact, and 2) negative impact. The positive impact of online social action on street activism as perceived by the participants were: 1) sparking people's interest in social and political action; 2) recruiting potential activists; 3) modifying people's behavior; 4) taking online tension to the street; and 5) protecting the existence of social movements. The perceived negative impact of online social action on street activism was explained by the participants as follows: 1) creating closed communities of like-minded people; 2) misleading assumptions about offline power and impact; and 3) lack of strong ties with the majority of the population. It was also perceived that online social action had no impact on areas where people didn't have any internet access.

Overall the student activists perceived the use of Web 2.0 tools as having a more positive impact on the Revolution than a negative one. Even though they indicated that their ties were not as strong with those who were not connected via social media sites, they agreed that their online communities of like-minded people encouraged activists participating online to participate offline. They also agreed that Web 2.0 tools provided a longer life cycle for their social movements and protected their existence. Countering previous research doubting the ability of online activism to lead to action on the ground, participants stated that online activism was an essential component of the overall success of the 2011 Revolution in Egypt. One participant stated, "We were able to accomplish many political gains through Facebook including judicial supervision of elections, and laws that would limit the powers of any elected president."

Based on my literature review, the study participants' reasons and perceptions are also aligned with Shirky (2011), who affirms that, "all over the world, activists believe in the utility of these tools and take steps to use them accordingly, and the government that they struggle with

think social media tools are powerful too, and are willing to arrest, exile, and kill users in response." Moreover, all participants discussed how online social action connected millions of Egyptians from all walks of life, which in turn promoted knowledge sharing, activists' recruitment, and significant awareness of issues and events on the ground. Similarly, authors including Faris (2013) and Shirky (2011) list three advantages of SMNs that help social movements with loose ties become more efficient: 1) SMNs make organizing and coordinating cheaper and faster—people are able to form groups, at low cost, with a very large number of people; 2) SMNs make it easier to arrive at shared understandings of meaning—the ability of each member of a group to not only understand the situation at hand but also understand that everyone else does; and 3) SMNs strengthen weak ties and enlarge social networks, which may have a positive overall effect by encouraging others to contribute.

Theme Four: Learning through the Use of Web 2.0 Applications. Theme four; learning in social action through the use of Web 2.0 applications, was used to answer part of the research question: According to these student's perceptions, what was the nature of learning occurring as they engaged in social action in Web 2.0? In the next section, theme five will answer the same research question in its entirety. Since it is not easy to disentangle the perceived nature of learning as participants engaged in social activism in both physical and virtual worlds, I elected to relay the findings in their entirety.

For theme four; however, I used raw data that was specifically pertinent to what the participants perceived they learned through their interaction using Web 2.0 tools as they planned for social action, and the impact of these tools had on them.

Collaboration. Throughout the interviews, all participants reflected on the benefits of Web 2.0 tools and what they learned through their online interactions with each other. All participants conveyed learning different forms of collaboration. At the beginning, they learned to

organize themselves through informal and democratic forms of organization. One participant stated, “In 2010, the calls for Khalid Said on Facebook started, we had to go to the street wearing black shirts and reading the Koran or the Bible or anything… it was very peaceful and it worked, the authorities let it go the first time, but the second time when our numbers increased they beat us up.” Another participant expressed how they used Facebook to work together to organize activities on the ground, “For January 25, we all agreed on the reasons for protesting, the cheer during our demonstrations, our demands, and what we would do if someone gets arrested.” One of the participants explained how she spread these instructions and information to her social circles online and offline, “During the Revolution, we used to post events such as the date and time of a demonstrations, updates on demonstrations as they were happening, and the arrival of security forces.” As such, they believed that they were responsible for relaying messages to their network of friends and relatives.

All participants agreed on other aspects of collaboration, including opening up to alternative points of views. One participant stated, “I learned to say my opinion and to consider the opposing opinion. To be humble enough to understand the opposing opinion. I learned to come in terms with how I see myself.” Similarly, one participant explained how he was exposed to different ideas, “I learned many political ideologies such as secularism, socialism, and democracy.” The idea of seeing value in collaboration and contribution to the public sphere was also mentioned by one participant, “We were able to liberate the public sphere with our bodies after we did that online.” These statements refer to how participants learned to collaborate with others by organizing themselves, working together, opening their minds to different opinions and ideas, and making a meaningful contribution to their online communities, which is also the first

important category under the fourth theme, and one of the learning aspects they perceived through their interactions online.

As noted in chapter two the use of social media networks, particularly Facebook, for collaboration has been reported in different studies. In a study by Sharma, Joshi, and Sharma (2016), for example, results showed that resource sharing, such as videos, assignments, projects, and pictures is the most influential determinant in the decision to use Facebook by students in higher education, followed by perceived usefulness, perceived enjoyment, collaboration and social influence. Likewise, most participants perceived Web 2.0 applications as an environment that is conducive for collaboration and sharing, which they were able to leverage to acquire collaborative skills.

The findings of this study also support Castells' (2012) claim that social media networks are decisive tools for mobilizing, organizing, deliberating, coordinating, and deciding. The participants of this study reported using Facebook and YouTube for opposition, networking, recruiting, mobilization, planning collective action, and raising the awareness of the public. They also used Facebook, YouTube and Twitter as a truth telling tools to contest the information disseminated and controlled by authorities during and following the revolution.

That these participants acquired collaborative skills is also consistent with previous research by Foley (1999), who conducted case studies around the world, including the United States of America, Australia, Brazil, and Zimbabwe. His case studies showed that during their involvement in social action the majority of activists experienced different examples of democratic, informal, and non- hierarchical organization, acquired expertise, and built new forms of organization. These skills were revealed in this study by all participants through their use of Web 2.0 tools to participate in and plan social action. All participants reported that they learned

to work together online in order to organize activities on the ground. Some reported the use of social media networks to spread instructions about demonstrations. They stated that they became open to alternative points of view, saw value in the views of others, and made meaningful contributions to their online and offline communities.

Storytelling. Another aspect of learning was expressed by the participants as storytelling, particularly in writing their stories and shouting out their ideas freely in order to share knowledge with their peers. According to the participants' perceptions, these personal stories reshaped the communicated knowledge into something personally meaningful and transcended their current environment or altered their reality, which helped them become more open-minded. One participant explained the importance of using her Facebook profile for keeping a digital diary, "I cannot protest in the street anymore because of the new restrictive protest law, so if I feel entirely oppressed and unable to talk; with time, I will start losing the meaning of things. When I write, I organize my ideas and I feel that I can express and shout them out." She added, "I will continue using Facebook to keep the idea of the Revolution in the collective mind." Similarly, another participant understood the importance of transferring her experience to others, "I am passionate about writing and I feel that transferring the real story is very important. Media is what influences people the most. What you say and how you say it makes a big difference in managing and directing public opinion."

Further, most participants expressed how they were able to tell their stories and express themselves freely using Web 2.0 tools, "I created a Facebook account, first, to connect with my friends, then I started mocking and disputing the ruling system." Another participant added, "Facebook gives me the freedom to write what I want on my wall." These statements show the

perceived learning opportunities of Web 2.0 tools as a conducive space for storytelling and the free exchange of ideas, which is another important category under the fourth theme.

Based on my literature review storytelling is, "the telling of small, personal, intimate, and mundane experiences" (Jong, 2014) that reveals epistemic shifts on personal and intimate terms (Lorimer, 2003). Robards (2012) claims that Facebook as a social site is not only a space in which young people can form and form a sense of self and belonging through socialization and communication, but also acts as a reflexive space where narratives of transition (e.g. from adolescent to adulthood or from one experience to another)occur, are commented upon, and are recorded and archived: the digital footprint of transition. The majority of this study's participants engaged in thoughtful writing and digital storytelling on Facebook, and described learning these skills through their involvement in social action, as well as using it to communicate their feelings, influence their peers, raise awareness in others, and share their experiences. Accordingly, my findings lend support to Robards' research that showed that as a social space Facebook invites interpersonal exchanges and prompt users to articulate the more mundane goings-on of everyday life.

My study also indicates an increased interest in user-generated content through user-led spaces of Web 2.0. This finding lends support to the work of Burns (2008), who suggests that users of social media applications do not only consume knowledge and information found online, but also have a role in producing it. Through Web 2.0 there is a process of creative and collaborative creation of content using text, photos and videos. Burns describes this process using the term "produsage;" breaking down the boundaries between producer and consumer and enabling all participants to both consume and produce information and knowledge, as well as collaborating and continually improving existing content. In another study, Laura West (2013)

explained the process of creating stories out of small posts on Facebook in more detail. She examined the sharing of an unfolding life event (the remodeling of a new house) on Facebook through short story posts. Facebook was an ideal venue for audience collection, particularly for linking the protagonist's narrative with people within the same social circle. This type of audience can then recreate the narrative and assist in shaping the small stories and connecting them discursively with the larger narrative that exists partially in other applications including blogs, and has partially yet to be experienced.

The findings of this study also support previous research by Williams and Jacobs (2004). There is evidence that user-created content encourages autonomy while simultaneously providing opportunities for greater interaction and deeper engagement with peers because the awareness of an audience encourages more thoughtful construction of writing and augments during knowledge creation (Williams and Jacobs, 2004). Most participants described having experienced powerful intellectual dialogues online. One participant reported, "When I write something and someone comments on it with a question, it challenges my knowledge, and I start to think whether what I wrote is right or wrong, then I start to reassess it."

The findings are also consistent with a comparable study by Mnisi (2015) in which students in a rural community in South Africa who had experienced, witnessed, or heard about HIV- and AIDS-related stigma used digital storytelling in order to take charge of effecting change in their community.

Critical reflection. Various instances of critical reflection, including the assessment of ideas and the critiquing of beliefs, came to light during the interviews. All participants spoke about how being exposed to different ideas and information through the Web 2.0 environment promoted them to be inquisitive, ask questions, and critically consider what they were reading or

being told. One participant stated, “When I write something and someone comments on it with a question, it challenges my knowledge, and I start to think whether what I wrote is right or wrong, then I start to reassess it.” Another participant explained how being exposed to vast amounts of digital information prompted him to make comparisons and reassess his former assumptions, “For example, this is the subway system of France and this is the one of Egypt, this is how it started, have we seen these things elsewhere before? You disentangle and dismantle all these [notions] by simply seeing that Obama is 40-years-old, but Mubarak is 80, or when you compare between news in digital media and the forged ones in the government run media.” Similarly, one participant said, “I started to think that I would have received a better education if the system wasn’t corrupt. I started to see the gap between our quality of living and the one of some foreign friends that I have. Differences in the relation between police and public, and between governments and citizens started floating to the surface. I saw different ideologies and political views that never existed during the past regime.”

One participant discussed how he went through a process of analyzing information, “we were told that we have a peculiar culture, or Egyptians are like that, what is peculiar about wanting a clean intravenous injection or wanting sidewalks?” It was evident that the participants didn’t accept all that they were told and have shown active evidence of critical reflection in many of their answers. One participant explained how he was encouraged through the use of social media to test the validity of different perspectives, acquire knowledge, and raise one’s as well as others’ awareness, “A reproduction of ideas occurs; next, each community of interest creates its discourse that is exchanged and becomes varied.” This statement demonstrates how Web 2.0 applications created a learning environment that prompted the participants to reflect critically on their living conditions, which is another important category under the fourth theme. The findings

of this study are in consistent with other authors (O'Reilly, 2005; Siemens, 2007; Careless, 2015; Shirky, 2011) who see Web 2.0 applications as transformational tools that can facilitate free, ubiquitous, and non-hierarchal critical discourses. According to O'Reilly (2005), Web 2.0 technologies facilitate communication and reflection. Siemens (2007) claims that Web 2.0 tools give individuals and groups the power to reflect on, dialogue about, and be exposed to diverse experiences and opinions – all in a participatory way. Similarly, Careless (2015) identifies one major benefit of social media in that it can serve as a conducive platform for critical discourse; "Social media are undeniably a rich site of learning in contemporary society –because the construction, reconstruction, and deconstruction of social media discourse depends on users, and because their structure is non-hierarchical and widely accessible, the discursive practice of social media may indeed be useful in facilitating critical discourse – providing a space for talking or 'typing back' to dominant power systems in society."

While reflecting on the benefits of Web 2.0 applications, particularly Facebook, most participants of this study described how it served as a catalyst for reflecting critically on both their and others' assumptions and ideologies, and how it was effective in changing these ideologies, ways of thinking, and beliefs. These findings support Shirky's (2011) claim that Web 2.0 applications support citizens as they communicate among themselves, create a counter-public sphere of discourse, and frame their views.

Most participants reported experiencing online discourse that helped in constructing and changing their ideologies. As noted in chapter two, in the context of transformative learning discourse is understood as "reflection made public" (Clark, 1993), and "that special function of dialogue devoted to searching for common understanding and assessment of the justification of

an interpretation or belief" (Mezirow, 2000, p.78, which leads to clearer understanding by tapping collective experience to arrive at a tentative best judgment (Mezirow, 2000).

Mezirow (1998) further defined the concept of critical reflection as what enables us to correct distortions in our beliefs and errors in problem solving. Critical reflection may be either implicit, as when we unconsciously choose between good or evil based on assimilated values, or explicit, when we deliberately examine and assess the reasons for making a choice. The study participants reported going through different steps starting by identifying assumptions that they had accepted unquestioningly up to that stage in their life, comparing those assumptions to facts, and realizing that the assumptions needed to be scrutinized for accuracy and validity, which they did through their interaction and discourse in Web 2.0 tools. Brookfield (2009) explains four stages for a critical reflection process. The first stage is to clearly identify the assumptions already in place about the subject. Second, we examine the validity of those assumptions based on evidence and calculate whether accepting them will lead to what we expect. Third, we look at alternative perspectives by examining the situation through the eyes of others. This step leads us to analyze whether our starting assumptions are still valid. Finally, based on this careful analysis, we take informed actions (ex. behavioral, cognitive).

Communication. Most participants shared how they were able to overcome their fears, find a voice, represent themselves and express their opinions freely for the first time through social media tools. One participant expressed how social media gave him the courage to express his opinions openly, "I feel shy when dealing socially with people, but when I am alone with the keyboard, it is something different. If I meet someone, I can never talk tough to him, but if I see him online, I can rip him apart." By the same token, one participant stated, "When I write [on my wall], I organize my ideas and I feel that I can express and shout them out." Another participant

explained how through Web 2.0 tools he was able to select and communicate aspects of his personality, “In the past, the only thing that I was able to choose, reflective of my personality, is a sticker on a school book.” These quotes refer to the last category under the fourth theme and show the perceived communication skills that were acquired through the use of Web 2.0 tools.

As discussed in chapter two, the use of SMNs promotes students’ communication by means of exchanging ideas, sharing thoughts, and exploring information together. McLoughlin and Lee (2007) explain that the dynamic social environments of social networking sites like Facebook allow youth to engage in creative, expressive forms of behavior and identity seeking which help them acquire communication skills.

In communication, finding a voice and engaging in a reflective discourse are closely linked. Mezirow (1994) suggested that certain conditions must exist for the full realization of discourse. These include having accurate, complete information, being able to weigh evidence, assess arguments objectively (Mezirow, 1994), having greater awareness of the context of ideas (Mezirow, 2000), having an open mind, learning to listen empathetically, bracketing premature judgment, seeking common ground, and being emotionally intelligent (Mezirow, 2003). These skills are assets that help adults assess alternative beliefs and participate fully and freely in critical-dialectical discourse; “Finding one’s voice is a prerequisite for full participation” (Mezirow, 2000).

To summarize, the perceived instances of learning that have emerged are: 1) collaboration; 2) storytelling; 3) critical reflection; and 4) communication. The learning occurring as the student activists engaged in social action via Web 2.0 is an active as well as a collaborative type of learning, which enabled them to develop communication skills and an active voice. There is little evidence in the literature about the nature of learning facilitated by

Web 2.0 tools during students' engagement in social action, so this conclusion adds new knowledge regarding the role of Web 2.0 tools in fostering active and collaborative types of learning.

Based on my literature review examples of the affordances of Web 2.0 technologies include collaboration, information sharing and discovery, knowledge building, and content modification and creation (McLoughlin & Lee, 2007; Collis & Moonen, 2008; Conole & Alevizou, 2010; McLoughlin & Lee, 2010; Biasutti & Deghaidy, 2012; Bennett et al., 2012; Ekoc, 2014; Pattanapichet & Wichadee, 2015; Al-Rahmi, 2015). For example, it has been suggested that the effective use of Web 2.0 applications, including software that allows easy broadcasting of audio files where learners interact to create a collective activity, enable the distribution of learner-generated content, which in turn acts as a catalyst and support for authentic, peer-to-peer learning and community building (McLoughlin & Lee, 2007). When participants assume active roles, according to McLoughlin and Lee (2010), many Web 2.0 tools offer learning experiences that are active, process based, anchored in and driven by participants' interests, and therefore have the potential to cultivate self-regulated, independent learning whereby participants take the necessary steps to learn, manage and evaluate their learning and provide self-feedback and judgment.

Theme Five: Learning in Social Action. Theme five; learning in social action, was used to answer the research question: According to these students' perceptions, what was the nature of learning occurring as they engaged in social action in both Web 2.0 and in real world urban spaces? This question addresses what student activists involved in social action reported having learned through the use of Web 2.0 tools and in real world urban spaces.

Based on analysis of the interviews, an interrelation between the emerging codes revealed the following categories, which will be discussed in depth in the following section. For a complete table of codes please refer to appendix (C):

1. making meaning of and interpreting their world;
2. seeing distortions in former beliefs and attitudes;
3. undergoing a perspective transformation;
4. building self-confidence and self-direction; and
5. taking action.

Figure 1 illustrates the above categories and their associated codes.

Figure 1. Theme five – Learning in Social Action

Making meaning. The learning process that the participants underwent during their social activism required a series of phases, starting with questioning the very foundation of their lives. For example, one participant stated, "I started questioning if I am really living in this country or if it is just a place of birth. I started to think that I did not exist. I felt I didn't have a voice. I was just a Facebook account."

In their quest to find dependable answers, participants made great efforts to make sense of their interpretation of themselves and their world. In the past, all the participants habitually accepted explanations by authority figures. One participant noted that, "during the first days of the 2011 Revolution, I was watching the government-controlled media that used to portray the people in Tahrir Square in an extremely negative way, as if the protestors' goal is to destroy the country. When Mubarak was ousted, I decided not to follow the media or allow it to control me anymore… to me, mainstream media deceives the public."

Seeing distortions in former beliefs. By examining and reflecting upon their meaning-making system, participants were able to describe some of the assumptions, personal biases, and beliefs that structured their previous perspectives. They observed distortions in their former beliefs and opinions. For example, one participant stated, "I discovered that Egypt is not the Mother of the World as they used to teach us in schools and feed us similar ideas through their media." Another participant noted, "I went from memorizing the Quran and being religious to seeing religion as a tool used by dictators to oppress the public." Yet another stated, "I started breaking and criticizing many religious ideologies that I grew up with. I decided to take off the veil, but my father strongly refused and we still have problems as a consequence."

Perspective transformation. Next, they all expressed how they started breaking former stereotypes, transforming some of their prior beliefs about themselves and the world, and

appreciating gender issues, religious plurality, and social diversity. One participant said, “In the past, the main factors in my relations were my religion, my church, and my Christian friends. Now, I see that people are all the same.” Another participant learned to appreciate societal diversity, “Poor people are the most important factor in any equation; without these people nothing would have happened or have changed. I never thought that these people will lead us in the marches and take in the bullets instead of us.” Their observations strongly suggest that they went through a perspective transformation. One of the participants described it as a “qualitative change,” and another participant described it as an “evolution.”

Building self-confidence and self-direction. The participants also expressed how they were able, as a result of their experiences, to build competence and self-confidence around new beliefs and ideas. Particularly, they perceived an emerging ability to take control over their own lives, an ability to dream of a better world, and an ability to shape policies that affect their lives. One participant stated, “there is no matter of fact about anything in this world; anything can change at any time if we decide to change it.” While another participant said, “I grew up not knowing how to express my opinion. Now, I let my voice be heard and I try to explain to others my views openly and unreservedly without any fear.” Another participant stated, “I started seeing everything from a wider perspective than before. My worldview has changed. My personality has changed 180 degrees. Since then my perspective changed completely towards society and the world. I transformed from being a simple-minded, superficial person or an airhead into being someone who cares about the greater good of his country.” In addition, they discovered their own power and the collective power of people. One participant explained, “I noticed that my words make a difference to younger students. I have many friends who are not involved in public labor but follow and think about what I write, specifically, when they tell me

that they got into the Political Sciences program or became members in student associations because of me. All this makes me feel that I am making a difference."

All participants reported instances of self-direction on different occasions during the interviews. More than one participant expressed how they had taken charge of finding the truth and taken ownership of their own learning; for example one participant stated, "I learned to be aware and be careful of what I post, which can negatively or positively influence other people. I also learned to not consider Facebook as a statistical indicator of the community, to not get too involved in details that sponsor wasting my efforts and my endurance capacities, and surely, not to assume that other people are honest or post the truth." Similarly, another participant stated, "we tried to develop ourselves and learn from our mistakes and avoid repeating them." One participant even went further by realizing her rights as student within Egypt's educational system, and acted upon this realization, "as a member of the student association I'm able to organize strikes demanding educational and social reforms." Another participant found autonomy in his digital space, "I learned some aspects concerning my own freedom. Meaning, this is my Facebook account, I can write what I want on my wall or post any picture. Nobody else has that right. If you don't like what I wrote then let it go, there is a space for comments, you have the right to post a comment, but if I don't like your comment, I have the right to remove it or block any person that I don't like. Facebook gives me this opportunity." These statements show how the participants took initiatives, with or without the help of others, diagnosed their own leaning needs, proactively searched for the truth, and took ownership of their learning needs in unprecedented ways.

Taking action. Finally, the strength of the participants' perspective transformation and self-confidence was demonstrated by the actions they took and continue to take during and after

the Revolution. They all described their continued need to make meaningful contributions to their communities and to be of service to others. These continuous contributions were described by one participant as, “protecting the Revolution and keeping its ideas in the collective mind.” Another participant described the same idea as, “denouncing and exposing injustice.” One participant decided to continue, “transferring the real stories to the public in order to raise their awareness.” Yet another advocated, “promoting minority rights.” Moreover, one participant decided to take ownership of his learning in order to, “construct a mature perspective of the world and become competent enough to claim the responsibility for my own country’s future.”

These findings are consistent with several authors (Clark, 1993; Freire, 1997; Foley, 1999; Mezirow, 2000; Taylor, 2008). For instance, Foley’s case studies (1999) examined the learning dimensions of women’s movements in Brazil during the period of military rule, a capitalist economic boom, and transition to formal democracy between 1964 and 1989. He focused on the changes in women’s political consciousness and the actions they took as a result. Foley found that while broad economic and political changes created the material conditions for social movements, these changes did not by themselves generate that type of activity. Foley concludes that, “for people to become actively involved in social movements something had to happen to their consciousness—they had to learn that social action was necessary and possible.” (p.5).

The process that enables people to become aware of oppressive social structures, understand how those structures influence their thoughts, and recognize their power to change their world (Freire, 1997) is a vehicle promoting the freedom, awareness, and autonomy of learners in transforming society (Taylor, 2008). This is achieved through praxis; a combination of action and reflection (Clark, 1993). Praxis—action that is informed—becomes the means of

changing the people's realities and those of their societies. Similarly, Mezirow (1989) asserts that individual transformation can lead to social action. Specifically, that transformative learners, with social change as their objective, may seek out others who share their insights to form resistance cells who challenge unexamined cultural norms in communities, families, and political life, and become active agents of social and cultural change (Mezirow, 2000). This type of action was advocated by most of this study's participants.

In sum, the nature of learning that occurred as the student activists engaged in social action in Web 2.0 and in urban spaces was active, collaborative, and transformational. The student activists were capable of: 1) making sense of their living conditions, and contrasting and comparing those economic and political conditions in a global context; 2) disassociating from their former beliefs about themselves and their world; 3) undergoing a perspective transformation and altering their beliefs; 4) building self-confidence and self-direction; and 5) using newly generated beliefs and opinions to take and guide their subsequent actions.

The learning process reported by the study participants is consistent with the process of transformative learning as described by Mezirow (2000). Mezirow's (2000) transformative learning process begins with a "disorienting dilemma" or experience; an event that induces powerful emotional responses in people. This event leads people to practice "critical reflection," where they begin to question their assumptions and the validity of their world-view. Similarly, Brookfield (2009) suggests that adults become aware of previously unquestioned assumptions when facing a crisis or a trauma, and realize that these assumptions need to be scrutinized for accuracy and validity. Next, people realize that others share their discontent and start testing new relationships, roles, and actions, participate in a "reflective discourse," and, "plan a course of action" (Mezirow, 2000). A reflective discourse helps people shift their focus from their world

view to that of others, as well as build the competence and self-confidence needed to integrate the new perspective.

The study participants expressed how they identified and disassociated themselves from previously held stereotypes, religious and social constraints, as well as former beliefs. These former beliefs or "frames of reference," as described by Mezirow (2000), are composed of habits of mind such as expectations, feelings, beliefs, and judgments. Kegan (2000) describes these frames of references undergoing change during a transformational learning experience; stereotypes, prejudices, and distortions are the raw material that undergoes alteration during a transformational learning experience. Kegan referred to Piaget (1954) to distinguish between transformational learning and informational learning. Informational types of learning are "Assimilative processes, in which new experience is shaped to conform to existing knowledge structures;" transformational types of learning, however, are, "Accommodative processes, in which the structures themselves change in response to new experience" (Piaget 1954 as cited in Kegan, 2000). With that in mind, it is safe to say that the participants' experience of social activism challenged and altered their understanding of the world. Specifically, they went through the process of perspective transformation that is at the core of the transformational learning process.

On many occasions the study participants expressed a sense of self-direction and autonomy. These findings counter previous transformative learning research doubting the ability of individuals living in non-democratic, authoritarian countries that value family traditions, caste, and class to go through perspective transformation or to acquire greater control of their lives as liberated learners.

The learning that my study participants acquired lends support to Foley's (1999) case studies that showed how involvement in social activism can help empower people; particularly by unlearning dominant, oppressive ideologies and discourses, and replacing them with oppositional, emancipatory ones. Similarly, in a study examining the Québec Student Movement, known as Le Printemps Érable, activists observed that allying with a diverse group of workers, community-based activists, undergraduate and graduate students, and professors provided rich opportunities for critical exchange, learning, and cultural cross-pollination (Palacios et al, 2013).

Involvement in social activism can also result in powerful learning opportunities and acquiring knowledge, habits, skills, and character traits such as, "self-development, self-agency, individual change, and emancipatory learning" (Foley, 1999). Similarly, Mezirow (1981) argued that people going through perspective transformation can gain control, a sense of agency, and personal responsibility over themselves and their lives.

Theme Six: Making Meaning in the Activist Role. Theme six; making meaning in the activist role, was used to answer the research question: After the 2012 Egyptian revolution, what meaning did the student activists derive from their new role in society? This question addresses how student activists involved in Egypt's 2011 Revolution understood and made sense of their role in society. How they gave meaning to their experiences as a whole includes their sense of self before and after the revolution, the meaning of being an activist, the responsibility inherent in the new role, and the assimilation of that role into their day-to-day activities.

Most participants believed that an activist is an individual who fights for the rights of others, focuses on the common good, and is concerned for those who are vulnerable or are unable to speak for themselves. One participant stated, "A political activist is someone who cares about absolute justice, he is against injustice, discrimination, and classification." Another

participant said, “An activist… aiming to achieve certain goals for the greater good.” One participant saw having such a role as self-sacrifice, “He does something that he feels no one else would do because everyone else is waiting for the activist to do it, they are almost sacrificing him, and this is part of being an activist.” These quotes represent the first category under the sixth theme and show how the participants perceived the activist as an advocate or someone defending others’ rights and, “someone that we turn to when we are desperate.” These examples show how the participants perceived activists as advocates, which is an important category under the sixth theme.

According to the participants, an activist is also an educator who is responsible for raising awareness concerning human rights and demonstrating the gap between current life conditions and more just alternatives. For example, one participant perceived the activist as one who has knowledge and is responsible for transferring it, “He has a unique prospective. He can see further than others.” Another described the activist as, “The one who lights the way for other people. The one who sees that people deserve better.” A participant who saw herself in the role of activist stated, “I will remind them of their rights that they don’t have.” Similarly, another participant described the same role, “I will continue to use social media to denounce and expose the injustices.” These statements illustrate the second category under the sixth theme and show how the participants perceived the role of the activist as educator, whose responsibility is to encourage others to learn about their rights.

Participants viewed activists as agents of change who positively and proactively interact with the environment, demonstrate vigorous interest in community development, help transform the living conditions of others, and take actions to effect economic, social, and political change. One participant stated, “The idea is wider than politics; it is concerned with the public sphere.

The idea of being proactive and change the absurd political, economic, and social status." He added, "You are a part of this society and you have responsibilities towards it. You are supposed to make a meaningful addition that can last." Another participant believed that activists had to look for alternative resources to affect the required change, "I want to achieve self-sufficiency… I don't want the ruling system to tell me one day that I cannot buy my food, I would like to make the community stronger so that no dictator would be able to do anything, it is a very big [idea] and difficult [to achieve] but it makes life more bearable." These statements show how the participants saw the role of an activist as an agent of change who challenges the status quo, which is another important category under the sixth theme. The following figure reiterates the above findings and illustrates how the participants perceived the role of an activist.

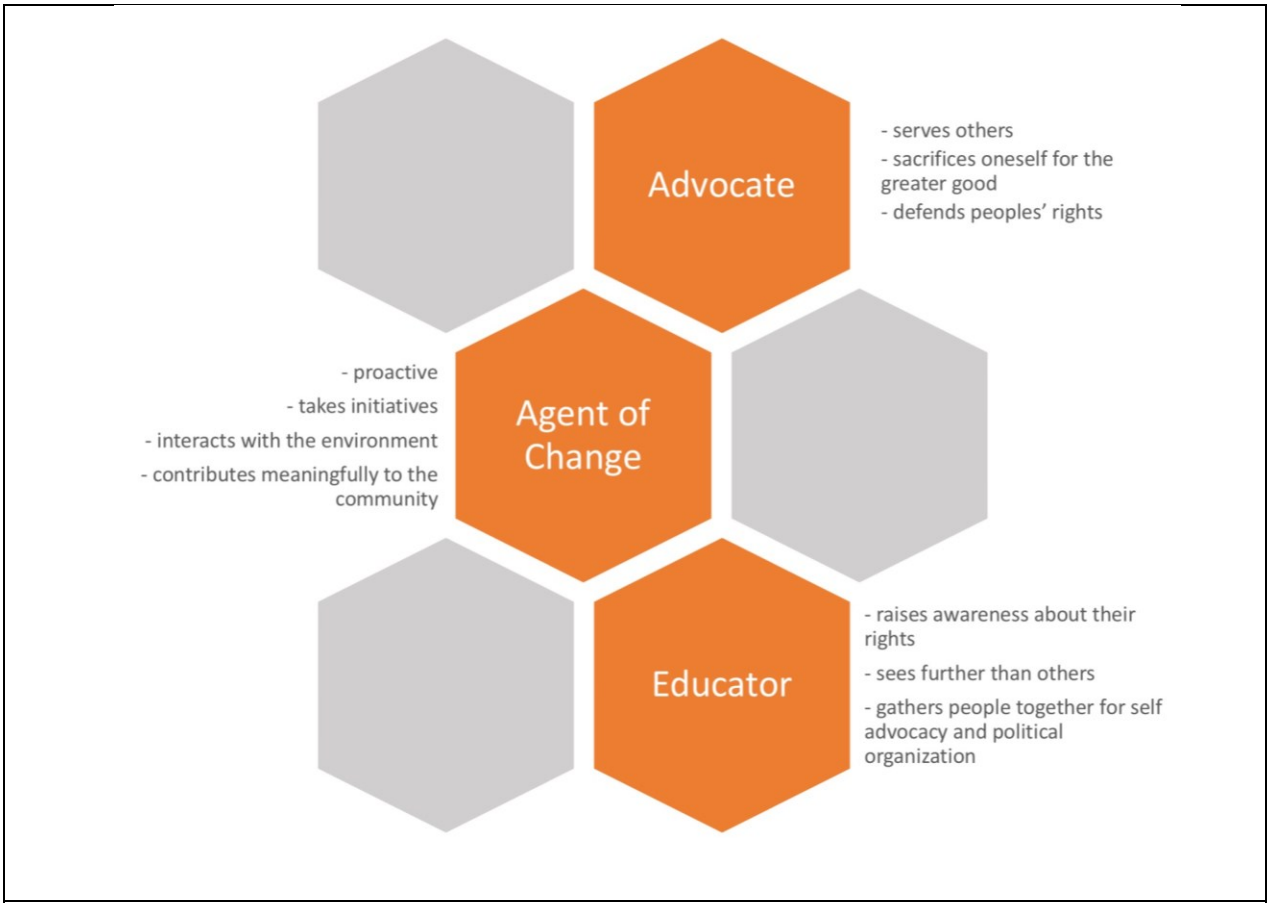

Figure 2. Theme six: The Perceived Role of the Activist

These findings lend support to a Taha, Hastings, and Minei, (2015) study that assessed the perception of activists by a large group of southeastern public university students. The results of the study showed that the students saw positive characteristics the behaviors they associated with activism, as exemplified by the notion of having "community formed together for a common goal, "sacrifice", "someone who is not afraid to stand up and speak", "mobilize people", "initiating discussion", and "doing research".

When reflecting critically on their experiences in the context of their new role in society, the study participants recognized themselves as advocates, educators, and agents of change. These findings suggest that the student activists started sensing their value, self-respect, and self-worth when they became active and got involved in social action. They perceived their new role as a responsibility, a duty, and a way of living. These findings point to a shift in the nature of their role in the society as well as in how they perceive themselves; they went from submitting to political repression and economic exclusion to proactively looking for freedom and human rights, and as a result went from doubting their self-worth and questioning the reasons of their existence to feeling great self-value and self-respect. Similarly, based on my literature review, Freire's ideas of "conscientization" or "critical consciousness" (1997) suggest that critical reflections on experiences enables people to become aware of the oppressive social structures in their world, understand how those structures have influenced their own thoughts, and recognize their power to change the world.

As noted in chapter two in the overview of Griff Foley's case studies, learning occurs as a result of peoples' struggle against oppression, as they start making sense of what is happening to them, create new ways of understanding the world, and work out ways of doing something

about it (Foley, 1999). In the case of the five student activists who are the participants of this study were able to critically interpret their living conditions, take significant risks, and exert themselves to make significant changes to those conditions.

This awareness and new perspective are still manifesting themselves as the participants continue to make meaningful contributions to their communities. Even if the revolution didn't achieve all of its goals, they continued to believe in and to fulfill perceived responsibilities by being of service to others. Participants gave examples of how they assimilated their new role into their day-to-day activities. For example, one participant discussed how he, in collaboration with other young protesters, created an interactive theatre initiative, My Hand on your Shoulder, to raise awareness through art, transmit the spirit of the revolution to various ghettos, and convey their messages to poor people in a non-traditional way. The student activists' post-revolution outreach efforts support Mezirow's (2000) claim that once individuals become self-confident in new roles and relationships, they reintegrate these new perspectives into every aspect of their lives.

The participants unanimously agreed that the meaning behind activism was "responsibility." They all held themselves accountable for serving their communities and advocating for peoples' rights, especially those who were marginalized and not fully aware of their rights. One participant described it as, "a way of living," another as, "simply being human," and one participant described it as, "The meaning of being human is interaction."

Throughout all my interviews and interactions with the study participants, I found that they viewed their existence in relation to the existence of others. They didn't claim leadership and viewed themselves as part of an empowered group of people who shared the same goal. It was clear that their understanding of activism and the role of the activist was based

predominantly upon the principles of collectivism and the greater good rather than those of individualism. One participant described this as, "An activist… aiming to achieve certain goals… These goals overshadow his personal goals." Based on my literature review the collectivism shared by the participants counters previous transformative learning research that suggest an individual rather than collective concept of responsibility, independence rather than interdependence, and individualism rather than collectivism and the greater good.

Summary of Findings

Several sets of findings have emerged from my data analysis. Firstly, the study found that the participants took six steps towards social activism, which also explained the reasons for their participation. These steps were: 1) feelings of dissatisfaction; 2) assessment of their current conditions; 3) finding the situation unbearable and sometimes life-threatening; 4) recognition that they are not isolated; 5) questioning one's role and experiencing feelings of guilt and responsibility; and 6) taking action (i.e. participating in social activism). Next, from the participants' perspective, they used Web 2.0 applications for five major reasons: 1) communication; 2) establishing a voice; 3) keeping up with current events; 4) learning about and comparing different sources of information; and 5) participating in and planning social action. Regarding perceived instances of learning, four different skills have been recognized: 1) collaboration; 2) storytelling; 3) critical reflection; and 4) communication. Furthermore, participants were capable of: 1) making sense of their life conditions, and contrasting and comparing between their living conditions, and contrasting and comparing these economic and political conditions in a global context; 2) disassociating from former beliefs about the world; 3) altering their own beliefs; 4) building competence and self-confidence; and 5) using newly generated beliefs and opinions to guide their subsequent actions.

Henceforth, the learning occurring as student activists engage in social action in both Web 2.0 and real world urban spaces can be considered active, collaborative, and transformational; prompting critical reflection and fundamental perspective transformation, and enabling the development of self-direction, communication skills, and an active voice.

Finally, additional findings showed that the study participants perceived the role of the activist as that of an advocate, an educator, and an agent of change. The participants unanimously conveyed the meaning behind activism as, "responsibility." Moreover, the participants' understanding of activism and the role of the activist were based predominantly upon the principles of collectivism and the greater good rather than those of individualism.

This chapter has used three different analytical approaches to explore the perceptions of university students who participated in Egypt's 2011 revolution using both Web 2.0 and real world urban spaces. The first approach was to retell and recreate the story of each participant in order to contextualize and inform the reader about the participants' experiences. The second approach was informed by themes emerging from academic literature, which were also used to structure the interview questions. The third approach provided the reader with a detailed cross-theme analysis used to compare commonalities in the experiences and perceptions of the five participants and to answer the study's research questions. Finally, the findings were related back to my literature review. The study's final chapter will discuss the significance of the findings and provide suggestions for future research.

Chapter Five: Conclusion

This chapter concludes my thesis by describing its implications for higher education, providing suggestions for future research, and describing the limitations of the study.

Implications for Educational Practice

This study suggests a multitude of implications for higher education. Based on the themes identified, the nature of learning occurring both online and offline during involvement in social action is revealed as largely informal, tacit, and frequently unrecognized. For example, when I interviewed study participants involved in social action for at least three years, they expressed surprise and appreciation at the learning process that they had undergone. They had been so focused on claiming basic rights, raising the awareness of others, and requesting political and educational reforms that they had not thought about learning. Even so, their leaning was profound, and continues to be of use to themselves and others. Exposing and documenting that learning process helps us more fully realize its value, and allows us to understand how people's experiences as activists create new ways of thinking and acting that can greatly support self-development and self-recognition.

It is also important that traditional educators understand that the formal educational process is but one part of a broad ensemble of education and learning tools, and that informal learning during social action and struggle provides a vast number of learning opportunities covering a host of subjects, including mobilization, campaigning, networking, teamwork, political organization, communication, party politics, and the practical benefits of social media in the real life.

This study's findings regarding the nature of learning during the involvement in social action provides support for the idea that learning was both active and collaborative. It has been

repeatedly advocated that, “Learning takes place through the active behavior of the student: it is what he does that he learns, not what the teacher does” (Ralph W. Tyler 1949 as cited in Biggs & Tang, 2011). It is therefore important that modern educators design and incorporate learning strategies that use different sensory modes of learning to provide multiple points of access to what students learn, and to actively engage them with the material. It is also equally important to create activities where students first look for information and then share it with each other in order to facilitate peer tutoring, and both face-to-face and online discussion groups. This group work results in greater student engagement, and provides opportunities for students to put collaborative emphasis on what they learn and how they learn it. Moreover, it is important to place value on student-created content to encourage them to become active learners—that is both producers and consumers of knowledge and ideas.

The results of this study also show that all the participants went through a transformational learning experience. Intensely transforming one’s perspectives and social relations, and disassociating from religion were frequently described as part of the transformational process that resulted from the engagement in social action. Educators should be encouraged to design learning experiences that help learners examine and challenge their frames of references, former assumptions, and unexamined cultural norms in order to become active agents of social and cultural change. Challenging students’ preconceived notions about themselves and the world, as well as creating situations that move students toward a broader, more inclusive worldview is a worthy goal for educators. This involves: 1) creating diverse learning environments that foster social democracy in the classroom, 2) ensuring that learners make informed learning decisions, 3) removing the asymmetric power relationship that exists

between teachers and learners, 4) allowing learners to participate in free reflective discourse, and 5) providing the learners with diverse forms of feedback.

The study's findings reveal that the use of social networking sites such as Facebook by student activists capitalized on their interaction, collaboration, critical reflection and communication, all of which were vital to their learning and perspective transformation. For example, the study participants were exposed to abundant and differing points of view, which helped them broaden their own viewpoints. They had the opportunity to compare and evaluate knowledge and information, which resulted in improved critical thinking and an increased ability to alter their former views. They were also able to reflect deeply on their contributions to the revolutionary discourse and found more courage to voice their opinions. Recognizing informal learning experiences in Web 2.0 applications could open up further possibilities for their use in self-directed learning and self-discovery. Educators should, hence be encouraged to use social media space to foster collaborative learning and encourage undergraduate students' critical thinking and self-direction.

Findings from the experiences of the five participants of this study also point to a shift in the nature of their role in Egyptian society as well as in how they perceive themselves. They went from passively submitting to political repression and economic exclusion to proactively looking for freedom and human rights, and as a result went from doubting their self-worth and questioning the reasons for their existence to sensing substantial self-value and self-respect. This observation has obvious implications for how we perceive the educational role of Web 2.0 technologies, particularly in non-Western, non-democratic countries where freer and safer participation in critical discourse can only occur online.

Finally, continued integration of social and political action into the participants' identity was made evident by the manner in which they referred to their future roles and planned actions in the local setting. For example, one participant mentioned that his network of friends created an interactive theatre initiative, *My Hand on your Shoulder,* to raise public awareness through art and transmit the ideas and spirit of the revolution to various ghettos, and to convey their messages to the poor in a non-traditional way. It is safe to say that the five participants transferred their online and offline learning experiences into the real world.

Suggestions for Future Research

The rich data obtained from the participants in this study supports a number of findings in current literature, and adds new knowledge. It also provided an opportunity for discussion and raises some questions.

The study clearly shows the effect of engagement in social action on students' learning, specifically the influence of street demonstrations, campaigning, mobilization, networking, and social movement politics. It would be interesting to explore teachers' perceptions of their role in student activists' education and if they perceive any differences in how those students approach formal learning following Egypt's 2011 revolution. The participants' subsequent engagement in the classroom remains an unexplored subject. Given the students' perspective transformation and the evolution of their roles in society, the shift from passive to active participation and contribution to community deserves to be further investigated.

To apply the findings of this study more broadly and in order to determine whether life events such as the involvement in social action produce transformational learning experiences, future research could expand the scope of investigation. For example, more case studies could explore similar events in other countries where students of social movements came together for a

cause, and risked a great deal to speak out against entrenched authority and power. The interviews in this study were conducted in Arabic in a Middle East country; a very specific context. Future cases could explore similar learning experiences from other non-Western developing countries or marginalized cultures.

This study provides concrete examples of how involvement in social action can lead to transformative learning and can provide opportunities for a greater sense of agency and self-discovery. This is another area that could benefit from more research. Given that only two participants in the study were female, and there is still limited research on female experiences in social activism, it would be beneficial to further explore the role of gender in transformational learning. This would help to identify the specific needs of female students and identify whether they differ from their male counterparts. That would provide educators with valuable data on what kind of support they might require, as well explore females' perception of their engagement in a traditionally male environment.

This study highlights the continued reintegration of social and political activism into the participants' roles and planned actions in local society. Future research could explore how the students of social movements reintegrate revolutionary and transformational learning into their lives. Case studies could also explore the strength of this study participants' perspective transformation and self-confidence overtime. For example, another study could interview the same participants to understand how the participants' continued making meaning in the activist role in their society over the long run, examine whether their perspective transformations remained stable, and investigate any additional changes in their frames of references.

Although this study showed how student activists' use of social media played a significant role in their learning, it remains an area that will benefit from more research. It will

be interesting to explore how educators can design activities in Web 2.0 tools to help students realize their potential as liberated, socially responsible, and autonomous learners. Careful implementation of the lessons learned could allow future studies to set questions in social media spaces to provoke reflective discourse, help learners make more informed choices, and enhance critical thinking among a much broader population of students; perhaps enough data to generate results capable of generalization.

Finally, future research could use this study to inform ongoing curriculum reform in Egypt for the purpose of integrating students into an educational system that achieves educational democracy.

Limitations of the Study

Given the qualitative nature of this study and the small number of participants, the findings are limited to them and are not suitable for statistical generalization. Four limitations are worth considering in detail. Firstly, the participants of this study cannot fully represent all the student activists who were involved in Egypt's 2011 Revolution. Though there maybe overarching experiences, these cannot be generalized beyond this group of participants. Secondly, the results of this study cannot be understood outside of the specific context in which they emerged including the political, educational, and economical systems specific to Egypt, and the background and particular cases of the individuals who participated. Thirdly, despite employing a variety of mechanisms to ensure the trustworthiness of the data, the fact still stands that the interviews were adapted from Arabic language into English, and although I recreated each story to represent each participant as accurately as possible, the process remains largely subjective. Since the stories had to be retold, my preconceptions may have tinted the process. Finally, the participants were only interviewed once, which can only produce a snapshot of their

learning process, not a continuing view of how the participants continued to make sense of their lives five years post revolution, what their current role is in local society, and whether or not they retained their hard won new perspectives.

Despite the above limitations, this research study provides rich data and insights into student activists' experiences in social action facilitated by Web 2.0 technologies, which may help current curriculum reform in Egypt so it can best support students' learning by giving voice to the main stakeholders, students—who risk being excluded from ongoing reform discussions. The results of the study are also transferrable to students in similar contexts in other authoritarian, non-Western countries, and anywhere where teaching is still highly traditional and does not encourage critical thinking. I hope that my findings will inform designers, policy makers, educators and educational institutions across the globe who wish to use Web 2.0 to improve formal learning.

References

Allagui, I., & Kuebler, J. (2011). The Arab spring and the role of ICTs: editorial introduction. *International Journal of Communication*, 1435-1442.

Al-Rahmi, W. M. (2015). The Role of Social Media for Collaborative Learning to Improve Academic Performance of Students and Researchers in Malaysian Higher Education. *International Review of Research in Open & Distance Learning, 16*(4), 177-204.

Altbach, P. G., Reisberg, L., & Rumbley, L. E. (2009). *Trends in global higher education: Tracking an academic revolution.* UNESCO 2009 World Conference on Higher Education.

Andrews, M., Squire, C., & Tamboukou, M. (Eds.) (2013). *Doing narrative research.* Sage.

Angel-Urdinola, D., & Semlali, A. (2010). *Labor markets and school-to-work transition in Egypt: Diagnostics, constraints, and policy framework.* Report for the WorldBank.

Arazy, O., Gellatly, I., Jang, S., & Patterson, R. (2009). Wiki deployment in corporate settings. *Technology and Society Magazine, IEEE*, 28(2), 57-64.

Barab, S. A., & Duffy, T. (2000). From practice fields to communities of practice. *Theoretical foundations of learning environments*, 25-55.

Baumgartner, L. M. (2012). Mezirow's theory of transformative learning from 1975 to present. In *Handbook of transformative learning,* (pp. 99-115).

Bennett, S., Bishop, A., Dalgarno, B., Waycott, J., & Kennedy, G. (2012). Implementing Web 2.0 technologies in higher education: A collective case study. *Computers & Education*, 59(2), 524-534.

Berdrow, I., & Evers, F. T. (2011). Bases of competence: A framework for facilitating reflective learner-centered educational environments. *Journal of Management Education*, 35(3), 406-427.

Biasutti, M., & El-Deghaidy, H. (2012). Using wiki in teacher education: Impact on knowledge management processes and student satisfaction. *Computers & Education*, 861-872.

Biggs, J., & Tang, C. (2011). *Teaching for quality learning at university.* Berkshire: McGraw-Hill.

Boeije, H. (2010). *Analysis in qualitative research.* Los Angeles: SAGE.

Boyd, R. D., & Myers, J. G. (1988). Transformative education. *International journal of lifelong education*, 7(4), 261-284.

Brookfield, S. (2009). The concept of critical reflection: promises and contradictions. *European Journal of Social Work,* , 12(3), 293-304.

Brown, J. S., Collins, A., & Duguid, P. (1989). Situated cognition and the culture of learning. *Educational researcher*, 18(1), 32-42.

Bryant, T. (2006). Social software in academia. *Educause quarterly*, 61.

Burns, A. (2008). *Blogs, wikipedia, second life, and beyond: From production to produsage.* New York: Peter Lang.

Careless, E. J. (2015). 'Typing Back': Social Media as Space For Critical Discourse. *New Horizons In Adult Education & Human Resource Development, 27*(3), 50-55.

Castells, M. (2012). *Networks of outrage and hope.* Cambridge, UK: polity.

Chadha, M., & Harlow, S. (2015). The writing is on the wall, or is it? Exploring Indian activists' beliefs about online social media's potential for social change . *International journal of communication*, 672-693.

Clandinin, D. J., Pushor, D., & Orr, A. M. (2007). Navigating sites for narrative inquiry. *Journal of Teacher Education*, 58(1), 21-35.

Clark, M. C. (1993). Transformational learning. In *New directions for adult and continuing education* (pp. 47-56).

Clark, M. C., & Wilson, A. L. (1991). Context and rationality in Mezirow's theory of transformational learning. *Adult Education Quarterly*, 41(2), 75-91.

Coiro, J., Knobel, M., Lankshear, C., & Leu, D. J. (Eds.) (2010). *Handbook of research on new literacies.* New York: Taylor & Francis Group, LLC.

Collis, B., & Moonen, J. (2008). Web 2.0 tools and processes in higher education: Quality perspectives. *Educational Media International*, 45(2), 93-106.

Conole, G., & Alevizou, P. (2010). *(2010). A literature review of the use of Web 2.0 tools in Higher Education.* UK: A report commissioned by Higher Education Academy.

Cormode, G., & Krishnamurthy, B. (2008). Key differences between Web 1.0 and Web 2.0. *First Monday,* , 13(6).

Courtenay, B. C., Merriam, S. B., & Reeves, P. M. (1998). The centrality of meaning-making in transformational learning: How HIV-positive adults make sense of their lives. *Adult Education Quarterly, 48(2), 65-84.*, 48(2), 65-84.

Daiute, C., & Turniski, M. (2005). Young people's stories of conflict and development in Post-war Croatia. *Narrative Inquiry*, 15(2), 217-239.

Dede, C. (2008). A seismic shift in epistemology. *EDUCAUSE review*, 43(3), 80.

Dirkx, J. M. (2001). The power of feelings: Emotion, imagination, and the construction of meaning in adult learning. *New directions for adult and continuing education*, (89), 63-72.

Dirkx, J. M. (2012). Nurturing soul work: A Jungian approach to transformative learning. In *The handbook of transformative learning: Theory, research and practice* (pp. 116-130).

Dirkx, J. M., Mezirow, J., & Cranton, P. (2006). Musings and Reflections on the Meaning, Context, and Process of Transformative Learning: A Dialogue Between John M. Dirkx and Jack Mezirow. *Journal of transformative education*, 4(2), 123-139.

Duderstadt, J. J. (2002). The future of higher education in the knowledge-driven, global economy of the 21st century. Toronto, Canada: 175th Anniversary Symposium.

Ekoc, A. (2014). Facebook Groups as a Supporting Tool for Language Classrooms. *Turkish Online Journal Of Distance Education, 15*(3), 18-26.

El Baradei, M., & El Baradei, L. (2004). *Needs assessment of the education sector in Egypt.* Cairo: Retrieved from http://www.zef.de/fileadmin/webfiles/downloads/projects/el-mikawy/egypt_final_en.pdf.

El Dahshan, M. (2011). *Egypt's revolution 2.0.* Foreign Policy. Retrieved from http://foreignpolicy.com/2011/05/25/egypts-revolution-2-0/ .

Elbendary, A. (2011). *Making history in Tahrir.* Jadaliyya. Retrieved from http://www.jadaliyya.com/pages/index/578/making-history-in-tahrir .

Ellison, N. (2007). Social network sites: Definition, history, and scholarship . *Journal of computer mediated communication*, 210.

Engeström, Y. (1987). *Learning by expanding. An activity-theoretical approach to developmental research.* Helsinki: Orienta-Konsultit Oy.

Faris, D. (2013). *Dissent and Revolution in a Digital Age: Social Media, Blogging and Activism in Egypt.* I. B. Tauris.

Fischer, G., & Konomi, S. (2005). Innovative media in support of distributed intelligence and lifelong learning. *Proceedings of the Third IEEE International Workshop on Wireless and Mobile* (pp. 3-10). Los Alamitos, CA: IEEE Computer Society.

Foley, G. (1999). *Learning in Social Action: A Contribution to Understanding Informal Education. Global Perspectives on Adult Education and Training.* New York: St. Martin's Press, Inc.

Freire, P. (1997). *Pedagogy of the oppressed.* New York: Continuum.

Giugni, M. G. (1998). Was it worth the effort? The outcomes and consequences of social movements. *Annual review of sociology*, 371-393.

Gladwell, M. (2010, October 4). Small change: Why the revolution will not be tweeted. *The New Yorker*. New York: Retrieved from http://www.newyorker.com/magazine/2010/10/04/small-change-malcolm-gladwell.

Glaser, M. (2006). *Digging deeper: Blogs, wiki, google bomb used to free Egyptian activist.* Media Shift. Retrieved from http://www.pbs.org/mediashift/2006/05/digging-deeperblogs-wiki-google-bomb-used-to-free-egyptian-activist143/ .

Gosselin, D., Cooper, S., Bonnstetter, R. J., & Bonnstetter, B. J. (2013). Exploring the assessment of twenty-first century professional competencies of undergraduate students in environmental studies through a business—academic partnership. *Journal of Environmental Studies and Sciences*, 3(3), 359-368.

Green, D. (2011). *What caused the revolution in Egypt?* The guardian. Retrieved from http://www.theguardian.com/global-development/poverty-matters/2011/feb/17/what-caused-egyptian-revolution .

Greenhow, C., Robelia, B., & Hughes, J. E. (2009). Learning, teaching, and scholarship in a digital age Web 2.0 and classroom research: What path should we take now? *Educational Researcher*, 38(4), 246-259.

Harlow, S., & Harp, D. (2012). A cross-cultural study of social networking sites and online and offline activism in the United States and Latin America. *Information, Communication & Society, 15*(2).

Herrera, L. (2012). Youth and Citizenship in the Digital Age: A View from Egypt. *Harvard Educational Review*, 333-352.

Jong, A. (2015). Using Facebook as a Space for Storytelling in Geographical Research. *Geographical Research, 53*(2), 211-223.

Joseph, S. (2011). Social media, political change, and human rights. *Boston College International & Comparative Law Review*, 145-188.

Kaplan, A. M., & Haenlein, M. (2010). Users of the world, unite! The challenges and opportunities of Social Media. *Business horizons*, 53(1), 59-68.

Kegan, R. (2000). "What 'Form' Transforms? A Constructive-Developmental Perspective on Transformational Learning. In *Learning as Transformation: Critical Perspectives on a Theory in Progress.* (pp. 35-52).

Klamma, R. C., Duval, E., Hummel, H., Hvannberg, E. H., Kravcik, M., Law, E., . . . Scott, P. (2007). Social Software for Life-long Learning. *Educational Technology & Society*, 10 (3), 72-83.

Lave, J., & Wenger, E. (1991). *Situated learning: Legitimate peripheral participation.* New York: Cambridge university press.

Lesch, A. M. (2011). Egypt's spring: causes of the revolution. *Middle East Policy Council, XVII*(3).

Lichtman, M. (2006). *Qualitative Research in Education: A User's Guide.* Sage Publications.

Logan, L. (2011). *The deadly beating that sparked Egypt revolution.* CBC News. Retrieved from http://www.cbsnews.com/news/the-deadly-beating-that-sparked-egypt-revolution/ .

Lorimer, H. (2003). Telling small stories: spaces of knowledge and the practice of geography. *Transactions Of The Institute Of British Geographers, 28*(2), 197-217.

Mackie, R. (1980). *Literacy and revolution : the pedagogy of Paulo Freire.* London: Pluto Press.

Mascolo, M. (2009). Beyond student-centered and teacher-centered pedagogy: Teaching and learning as guided participation. *Pedagogy and the Human Sciences*, 1(1), 3-27.

Masson, P. (2011, February 5). Twenty reasons why it's kicking off everywhere. *BBC News*. UK: Retrieved from http://www.bbc.co.uk/blogs/legacy/newsnight/paulmason/2011/02/twenty_reasons_why_its_kicking.html.

McCaughey, M., & Ayers, M. D. (2003). *Cyberactivism: Online activism in theory and practice.* New York: Routledge.

McLoughlin, C., & Lee, M. J. (2007, December). Social software and participatory learning: Pedagogical choices with technology affordances in the Web 2.0 era. *ICT: Providing choices for learners and learning. Proceedings ascilite Singapore 2007*, pp. 664-675.

McLoughlin, C., & Lee, M. J. (2010). Personalised and self regulated learning in the Web 2.0 era: International exemplars of innovative pedagogy using social software. *Australasian Journal of Educational Technology*, 28-43.

Megahed, N., Ginsburg, M., Abdellah, A., & Zohry, A. (2008). *Active-Learning Pedagogies as a Reform Initiative: The Case of Egypt.* Washington, DC.: EQUIP1 Research Report.. American Institute for Research.

Merriam, S. B. (2004). The role of cognitive development in Mezirow's transformational learning theory. *Adult education quarterly,* , 55(1), 60-68.

Mezirow, J. (1978). Perspective transformation. *Adult Education Quarterly*, 28(2), 100-110.

Mezirow, J. (1981). A critical theory of adult learning and education. *Adult education quarterly*, 32(1), 3-24.

Mezirow, J. (1990). How critical reflection triggers transformative learning. In *Fostering critical reflection in adulthood* (pp. 1-20).

Mezirow, J. (1991). *Transformative dimensions of adult learning.* San Francisco, CA: Jossey-Bass.

Mezirow, J. (1994). Understanding transformation theory. *Adult education quarterly*, 44(4), 222-232.

Mezirow, J. (1997). Transformative learning: Theory to practice. In *New directions for adult and continuing education* (pp. 5-12). Jossey-Bass.

Mezirow, J. (1998). On critical reflection. *Adult Education Quarterly*, 48(3), 185-198.

Mezirow, J. (2000). Learning to think like an adult. In J. Mezirow, & al., *Learning as transformation: Critical perspectives on a theory in progress* (pp. 3-33). San Francisco: Jossey-Bass.

Mezirow, J. (2003). Transformative learning as discourse. *Journal of transformative education*, 1(1), 58-63.

Mnisi, T. (2015). Digital storytelling: Creating participatory space, addressing stigma, and enabling agency. *Perspectives in Education, 33*(4).

MOE. (2008). *Ministry of Education*. Retrieved from National strategic plan for pre-university education reform in Egypt. 21.10.13. Arab Republic of Egypt.:

http://portal.moe.gov.eg/AboutMinistry/Lists/DocLib_Title_StrategicPlan/Chapter1Part3.pdf

Ntseane, P. G. (2012). Transformative learning: A perspective from Africa. In *Handbook of transformative learning: Theory, research and practice* (pp. 274-288).

Nunns, A. (2011). *Tweets from Tahrir square. The Guardian. Retrieved from http://www.theguardian.com/world/2011/nov/25/tahrir-square-twitter-protest-egypt* . The Guardian. Retrieved from http://www.theguardian.com/world/2011/nov/25/tahrir-square-twitter-protest-egypt .

O'Reilly, T. (2005). *What is web 2.0: Design patterns and business models for the next generation of software*. Retrieved from the author's website: http://oreilly.com

Palacios, L., Hampton, R., Ferrer, I., Moses, E., & Lee, E. O. (2013). Learning in Social Action: Students of Color and the Québec Student Movement. *Journal of Curriculum Theorizing*, 29(2), 6-25.

Parks, C. (2011). *What's going on in Egypt?* The Huffington Post. Retrieved from http://www.huffingtonpost.com.

Pattanapichet, F., & Wichadee, S. (2015). Using space in social media to promote undergraduate students' critical thinking skills. *Turkish Online Journal Of Distance Education (TOJDE), 16*(4), 38-49.

Perez, B. C. (2013). The power of the proverbial pen: The importance of social media during the arab spring. *ProQuest Dissertations and Theses, , 134*. Retrieved from http://0-

search.proquest.com.mercury.concordia.ca/docview/1355113812?accountid=10246. (1355113812). .

Polkinghorne, D. E. (2005). Language and meaning: Data collection in qualitative research. *Journal of counseling psychology*, 52(2), 137.

Polkinghorne, D. E. (2007). Validity issues in narrative research. *Qualitative inquiry*, 13(4), 471-486.

Prosser , M., & Trigwell, K. (2006). Confirmatory factor analysis of the approaches to teaching inventory. *British Journal of Educational Psychology, 76*, 405-419.

Ravenscroft, A. (2009). Social software, Web 2.0 and learning: status and implications of an evolving paradigm. *Journal of Computer Assisted Learning*, 25(1), 1-5.

Reinhardt, W., Schmidt, B., Sloep, P., & Drachsler, H. (2011). Knowledge worker roles and actions—results of two empirical studies. *Knowledge and Process Management*, 18(3), 150-174.

Resnick, L. B. (1987). The 1987 presidential address: Learning in school and out. *Educational researcher*, 16(9), 13-54.

Riessman, C. K. (2013). Analysis of personal narratives. *Qualitative Research in Social Work*, 168.

Riessman, C. K., & Quinney, L. (2005). Narrative in Social Work A Critical Review. *Qualitative Social Work*, 4(4), 391-412.

Robards, B. (2012). Leaving MySpace, joining Facebook: 'Growing up' on social network sites. *Journal Of Media & Cultural Studies, 26*(3), 385-398.

Rodriguez, T. (2012). *Politicians and activists in Egypt embrace social media to enhance support.* Your Middle East. Retrieved from http://www.yourmiddleeast.com/features/politicians-and-activists-in-egypt-embrace-social-media-to-enhance-support_10996 .

Roksa, J., & Arum, R. (2011). The state of undergraduate learning. *The Magazine of Higher Learning*, 43(2), 35-38.

Seidman, I. (2013). *Interviewing as Qualitative Research: A Guide for Researchers in Education and the Social Sciences.* New York, NY: Teachers College, Columbia University.

Sharma, S. K., Joshi, A., & Sharma, H. (2016). A multi-analytical approach to predict the Facebook usage in higher education. *Computers in Human Behavior, 55*, 340-353.

Shirky, C. (2011). Political Power of Social Media-Technology, the Public Sphere Sphere, and Political Change. *The. Foreign Aff.*

Siemens, G. (2007). Connectivism: Creating a learning ecology in distributed environments. In *Didactics of microlearning: Concepts, discourses, and examples* (pp. 53-68). Munster: Waxmann.

SIS. (2011). *Population and Labour Statistics.* Egypt: Central Agency for Public Mobilization and Statistics.

SIS. (2012). *Population and Labour Statistics.* Egypt: Central Agency for Public Mobilization and Statistics.

Smith, R. O. (2012). Fostering transformative learning online. In *The handbook of transformative learning: Theory, research and practice* (pp. 408-422).

Sudbury, J., & Okazawa-Rey, M. (Eds.). (2009). *Activist scholarship: Antiracism, feminism, and social change.* London: Paradigm Publishers.

Taha, D. E., Hastings, S. O., & Minei, E. M. (2015, December). Shaping Student Activists: Discursive Sensemaking of Activism and Participation Research. *Journal of the Scholarship of Teaching and Learning, 15*(6), 1-15.

Tarrow, S. (1996). Social movements in contentious politics: A review article. *American Political Science Review*, 874-883.

Taylor, E. W. (2007). An update of transformative learning theory: A critical review of the empirical research (1999–2005). *International Journal of Lifelong Education*, 173-191.

Taylor, E. W. (2008). Transformative learning theory. In *New directions for adult and continuing education* (pp. 5-15).

Taylor, E. W., Cranton, P., & associates. (2012). *The handbook of transformative learning: Theory, research, and practice.* San Francisco: Jossey-Bass.

Taylor, K., & Elias, D. (2012). Transformative learning: A developmental perspective. In *The handbook of transformative learning: Theory, research, and practice* (pp. 147-162).

Testimonies of journalists covering Egypt's revolution. (2011, April 7). Retrieved from Doha Centre for Media Freedom: http://www.dc4mf.org/en/content/testimonies-journalists-covering-egypts-revolution

The Conference Board of Canada. (2014). Employability Skills 2000+. Ottawa, Ontario, Canada. Retrieved from The Conference Board of Canada: http://www.conferenceboard.ca/topics/education/learning-tools/employability-skills.aspx

Thomas, A. (2008). Community, culture, and citizenship in cyberspace. In *Handbook of research on new literacies* (pp. 671-698).

Tisdell, E. J. (2012). Themes and variation of transformational learning: Interdisciplinary perspectives on forms that transform. In *The handbook of transformative learning: Theory, research, and practice* (pp. 21-36).

Trigwell, K., Prosser, M., & Ginns, P. (2005). Phenomenographic pedagogy and a revised Approaches to teaching inventory. *Higher Education Research & Development, 24*(4), 349-360.

Trigwell, K., Prosser, M., & Waterhouse, F. (1999). Relations between teachers' approaches to teaching and students' approaches to learning. *Higher Education, 37*(1), 57-70.

Tynjälä, P., Välimaa, J., & Sarja, A. (2003). Pedagogical perspectives on the relationships between higher education and working life. *Higher Education*, 46(2), 147-166.

UNDP. (2010). *Youth in Egypt: Building our future.* New York: http://hdr.undp.org/en/reports/national/arabstates/egypt/Egypt_2010_en.pdf.

UNESCO. (1998). *World Declaration on Higher Education for the Twenty-First Century.* Retrieved from UNESCO: http://www.unesco.org/education/educprog/wche/declaration_eng.htm

USAID. (2004, April). *Strengthening Education in the Muslim World: Country Profiles and Analysis.* Retrieved from Bureau for Policy and Program Coordination: http://pdf.usaid.gov/pdf_docs/PNACW877.pdf

Vargas, J. A. (2012). *Spring awakening: how an Egyptian revolution began on FaceBook.* The New York Times. Retrieved from http://www.nytimes.com/2012/02/19/books/review/how-an-egyptian-revolution-began-on-facebook.html?pagewanted=all&_r=0 .

Wahba, K. (2011). The Egyptian revolution 2009: the fall of the virtual wall –the revolution systems thinking archetyp. *In the 29th International System Dynamics Conference* (pp. 24-28). Washington, DC: USA .

Wenker, N. L. (2012). Revolution 2.0---the political impact of internet and social media proliferation in authoritarian countries. *ProQuest Dissertations and Theses, , 131*. The University of North Carolina at Chapel Hill: Retrieved from http://0-search.proquest.com.mercury.concordia.ca/docview/1024563223?accountid=10246. (1024563223).

West, L. E. (2013). Facebook sharing: A sociolinguistic analysis of computer-mediated storytelling. *Discourse, Context & Media*, 1-13.

Williams, J. B., & Jacobs, J. (2004). Exploring the use of blogs as learning spaces in the higher education sector. *Australian Journal of Educational Technology, 20*, 232–247.

WorldBank. (2007). *Arab Republic of Egypt - Improving quality, equality, and efficiency in the education sector : fostering a competent generation of youth.* Washington, DC: World

Bank.: http://documents.worldbank.org/curated/en/2007/06/9604483/arab-republic-egypt-improving-quality-equality-efficiency-education-sector-fostering-competent-generation-youth . Retrieved from Washington, DC: World Bank: http://siteresources.worldbank.org/EDUCATION/Resources/278200-1099079877269/547664-1099079967208/Expanding_Opportunities_Secondary.pdf

WorldBank, T. (2009, March 01). *Education for the Knowledge Economy*. Retrieved from The World Bank: http://web.worldbank.org/WBSITE/EXTERNAL/TOPICS/EXTEDUCATION/0,,contentMDK:20161496~menuPK:540092~pagePK:148956~piPK:216618~theSitePK:282386,00.html

Wright, S. C., Taylor, D. M., & Moghaddam, F. M. (1990). Responding to membership in a disadvantaged group: From acceptance to collective protest. *Journal of Personality and Social Psychology*, 58(6), 994.

APPENDIX A

Consent to Participate in the Connection between Transformational Learning, Social Action and Web 2.0: The Case of Egyptian Student Activists

I understand that I have been asked to participate in a research project being conducted by Dalia Radwan of the Department of Education of Concordia University, under the supervision of Professor Ann-Louise Davidson of the Department of Education of Concordia University.

A. PURPOSE

The purpose of this study is to explore meaning-making and perceived learning experiences of students involved in social action in Egypt who use and interact in Web 2.0 networks and tools. Precisely, this study intends to explore this group's subjective and inter-subjective experiences of learning about their new role in the society as social activists.

B. PROCEDURES

I understand that this research will require me to tell my story and to respond to questions in one or more interviews. These interviews will be conducted in-person and take between 60 to 90 minutes each. I have been informed that my identity will be kept confidential. I am assured that at any point in time I may withdraw from this study and any information that may have been collected will be discarded. I also understand that the data from this study may be published.

C. RISKS AND BENEFITS

I understand that there is a potential emotional vulnerability that comes with personal disclosure, and I am aware of the referral to contact if the need arises. The benefits include giving my voice to represent young activists living under conditions of political repression and economic exclusion, which can inform policy makers, educators, web developers, and people involved in social action.

I HAVE CAREFULLY STUDIED THE ABOVE AND UNDERSTAND THIS AGREEMENT. I FREELY CONSENT AND VOLUNTARILY AGREE TO PARTICIPATE IN THIS STUDY.

NAME

_____

SIGNATURE

_____

If at any time you have questions about the proposed research, please contact the study's Principal Investigator, Dalia Radwan of the Department of Education of Concordia University (*dahlia.radwan@gmail.com*); or Professor Ann-Louise Davidson of Department of Education of Concordia University (*e-mail)*.

If at any time you have questions about your rights as a research participant, please contact the Research Ethics and Compliance Advisor, Concordia University, 514.848.2424 ex. 7481 ethics@alcor.concordia.ca

APPENDIX B

The Unstructured Interview Guide

Hi, thank you for volunteering to participate in this study. I would like to remind you that the research that I am conducting is part of my Master's degree in Educational Technology at Concordia University in Montreal, Quebec. The purpose of my research study is to explore the meaning of the lived experiences for students involved in civic, collective action, particularly, in the 2011 Egyptian Revolution and the role of Web 2.0 in their experiences. I would like to ensure that you have read the consent form, and know that any private information tied to your identity will be kept confidential. You are also free to stop the interview at any time and you may request to destroy the information that may have been collected up to one week after reviewing the interview transcript.

During this 60-90 minute interview, I will ask you some questions. The interview will be divided into three sections. The purpose of the first section is to establish the context of your experience, the second section will allow you to reconstruct your experience as a student involved in social action in urban spaces and in Web 2.0, and in the third section you will reflect on the meaning your experience holds for you.

Section One: Focused Life History

Firstly, I would like to get to know more about you and your history and background. Feel free to share any thoughts or experiences that come to you, at any time. Are you ready to begin?

Tell me more about yourself. If you could tell me your life story up until the time you became a student activist, what would it be?

- Possible probing questions:

- Are there particular experiences in your life that have taught you about yourself? Describe these to me.
- What you would consider to be your best qualities?
- What would people who know you best say are your best qualities?
- Tell me about your family and friends. What do you do with them?

Can you explain the circumstances of when you started using social media?

- Possible probing questions:
  - When did you start using it?
  - How did you learn how to use it?
  - Is it something you used frequently or not?
  - What sort of activities did you engage in Web 2.0 tools in the past?
    - Was it mostly for discussions, or for following people and events?

Next I would like to explore your experiences in social action in urban spaces as well as Web 2.0 social media networks. Are you ready to continue?

Section Two: The Details of Experience

You mentioned that you are an activist. What brought you to Tahrir Square?

- Possible probing questions:
  - Describe the circumstances that brought you to Tahrir square
  - How have your previous experiences that may have prepared you for social action?
  - Describe to me a protest day from the time you wake up to when you go to bed
  - During a protest day, do you experience specific feelings and emotions? Describe them

- Tell me about the people you have met, and the community in Tahrir Square
  - Are people different in Tahrir Square than people who don't participate in protesting? How?
  - How do you interact with other activists?
  - List three things that you have learned from interacting with activists?

What would you say that social action has taught you?

- Can you list three things you learned from being a social activist?
- What is the most important thing of these three things you just listed?
- What would you say that protesting in Tahrir Square or any other urban space has taught you?
- Have you experienced a change in your perspective or worldview? Describe it.

What are new values/skills that you think you have learned? How did you learn them?

What do you consider the role of social media in the revolution? Why? How?

What did you learn from participating in social media during the revolution? How?

Do you feel that social media has prepared you, even partially, to become an activist?

- Probing question:
  - Did you mostly lurk or did you find yourself engaging in different conversations? Were the conversations different from one social media site (or app) to the other?
  - Do you think that Web 2.0 interactions have made you experience a change in your perspective or worldview? Describe it.

Now I would like to know what these experiences you've described earlier mean to you. Are you ready to continue?

Section Three: Reflection on the Meaning

What does activism mean to you?

- Possible Probing question:
    - What have you learned about yourself in social action?
    - How this new learning may impact your future action? Or where do you see yourself going in the future?
    - What does it mean to you, to be portrayed as a political and social activist?
    - Have you changed over the years? In what ways have you changed?
    - If there were anything you could change in your life, what would it be?

Reflecting about your interactions in Web 2.0 applications. Would you do it again? Would you do anything differently? What purpose did they serve?

- Probing questions:
    - Did you learn anything relevant from using social media with regards to social activism?
    - Did social media prepare you to become an activist or did it better inform your actions as an activist or did it allow you to be reflective about activism?

What do you think students in Egypt could learn from activists?

- Probing questions:
    - Do you think they have anything relevant to learn from Web 2.0 interactions?
    - From what you learned in your experiences as a social activist in urban spaces and in Web 2.0, would you have any advice for a young person who wants to become a social activist in terms of how to use Web 2.0 technologies?

Are there any other thoughts you would like to share with me?

End of the interview.

I would like to deeply thank you for your trust, for taking the time to meet with me, and for sharing your experiences. If any other thoughts come to you that you would like to add to what we've discussed, please feel free to contact me at any time. I would like to ensure you that you can always add or change anything now or within the next 10 days. I will be happy to share the findings of my study with you. Would you mind if I contact you again in the near future if I have questions concerning the information collected from the interview? How can I contact you in the future?

Thank you for your collaboration and I wish you a great day/evening.

Thank you for your participation

APPENDIX C

Theme One - Codes and Representative Quotes	
Codes	Quotes
Sense of discrimination	We are in a society that tends to discriminate and classify
Thoughts of uncertainty	I always had a question in mind, who am I?
Feelings of distrust	The regime had displayed one out of its many different faces and more fraudulent incidents were taking place
Critical assessment of the situation	At first, my criticism was based on the lack of democracy and … corruption schemes. Later, it was ideologically based on human right violations, police brutality, and many other provocations practiced back then by the government
Warning of probable trouble	It is me now who is now facing life threats
I'm not alone	I realized that I'm not alone and there are many others who shared my discontentment
Questioning one's existence	I started to think that I did not exist. I felt I didn't have a voice. I was just a Facebook account.
Feelings of guilt/responsibility	My non-participation in the beginning of the revolution is nothing less than a shortcoming from my side. I had to participate. I had to be more proactive.
Believing in the new role (activist)	My reasons lie in the 2011 Revolution motto: bread, freedom, and social justice
It is the only right thing to do	I was scared the first time I attempted to take a stand against authorities, but I felt that it was the only right thing to do

Theme Two - Codes and Representative Quotes	
Codes	Quotes
Connecting with friends	I was asked by my friends to create a Facebook account
Expressing opinions freely	I used to log in to Yahoo! chat rooms and online forums to write and express my opinions about social issues or whatever came to my mind
Transferring messages and	Social media networks serve as fast and safe tools for transferring the

ideologies	activists' messages and ideologies
Finding interest in reading blogs	I am very interested in reading certain blogs
Watching videos	I use YouTube to watch news, tutorials, and political debates
Writing and reading others' posts	I use Facebook to write posts or read others' posts
Reading news	I also use Facebook to read articles from online newspapers
Criticizing the ruling system	I started to make fun of my circumstances after graduation. Later, I started to make fun of the circumstances of the country, and in 2008, I started mocking and disputing the ruling system
Organizing oneself	We agree on and plan for our student association meetings and future actions on Facebook
Networking	If there is no Facebook, our political party will fall apart because the structure of the party has been built on Facebook
Meeting in a safe environment	Sometimes we meet on Skype if there is violence in the street
Transferring street demonstrations and sit-ins to the virtual world	YouTube helped me distribute the real stories with real pictures from the streets of Egypt in order to document the revolution and back up our claims
Organizing political events	Why would I go out to distribute flyers in the university if I can easily post an event on Facebook? The event will reach many more people and I will not put my safety in danger
Acquiring an online political role	An activist can be active online. Youth activists have been trying to acquire an effective role in the street but they don't have the money, and to some extent they don't have strong organizational skills

Theme Three - Codes and Representative Quotes	
Codes	Quotes
Online documenting of street social action activities	YouTube helped us distribute the real stories with real pictures from the streets of Egypt in order to document and back up our claims
Creating strong impact	Blogs created a strong impact
Transferring online ideological tensions to the street	Facebook helped Egyptians, for the first time, to see themselves in their debates and they were eager to transform these virtual debates

	into things in the real world. We were able to liberate the public sphere with our bodies after we did that online
Shaping minds	Blogs are God's gift to humanity, most of the blog posts by activists including Wael Abbas (…) shaped the youth minds
Forming mainstream	Blogs formed a mainstream
Becoming more susceptible to participate in social action	Often times I had tried to get on with my normal life and detach from politics. However, whenever I read a post or a piece of news on Facebook, I found myself commenting on or sharing the news and eventually I would get involved again in the ongoing events beyond the online world.
Recruiting potential activists	We used to videotape our marches and demonstrations and post them on YouTube. This helped us recruit more people, broadcast and promote our activities and ideologies, and maybe over time as more people follow our news, they will become convinced by our ideologies
Encouraging street activism	I saw that people who joined us after the first 18 days of the revolution were more revolutionaries than us, as if they had awareness retrieval, like the moment when you switch on the light
Protecting the existence of social action	Facebook is more of an outlet than a catalyst or an initiator. The energy is there, but it needs a vent, and since the vent doesn't exist in political parties, or marches, or media, it will exist here because this is the only outlet
Assessing gains/losses	We were able to accomplish many political gains through Facebook including judicial supervision of elections, and laws that would limit the powers of any elected president
Limited access	There are places that don't have internet access, which we have to penetrate through parties and movements
Creating closed community	We became a closed community of like-minded people. We only talk to each other. We talk to people who are already convinced of the need for change
Deceiving power	Everyone on Facebook had a circle of followers, thinking that these are the only circles out there. We thought that we account for almost 70% of the weighted votes (…) but, 77% were in favor of the MB (i.e. Muslim Brotherhood political party) and the Salafies. That was the first lesson

Theme Three Categories		
Positive impact	**Negative impact**	**Lack of impact**
Documenting and sharing facts	Creating closed communities	Recruiting different communities with limited or no internet access
Assessing assumptions	Misleading assumptions of power and impact	Modifying the behavior of communities with limited or no internet access
Modifying people's behavior		
Recruiting potential activists		
Taking it to the streets		
Assessing gains/losses		
Providing longer life-cycle for social movements		

Theme four - Codes and Representative Quotes	
Codes	Quotes
Organizing oneself	In 2010, the calls for Khalid Said on Facebook started, these calls were clever and gradual, … we had to go to the street wearing black shirts and reading the Koran or the Bible or anything while giving our back to the street, it was very peaceful and it worked, the authorities let it go the first time, but on the second time when our numbers increased they beat us up
Working together	For January 25, we all agreed on the reasons for protesting, the cheer during our demonstrations, our demands, and what we would do if someone gets arrested
Expressing one's opinion	I created a Facebook account, firstly, to connect with my friends, and then I started to make fun of my circumstances after graduation. Later, I started to make fun of the circumstances of the country, and in 2008, I started mocking and disputing the ruling system
Exposing to different opinions/ideas	I learned many political ideologies such as, secularism, socialism, and democracy

Making comparisons	Internet has created something that would destroy any authoritarian system in Egypt, which is critical thinking and the critical mind, for example, this is the subway system of France and this is the one of Egypt, this is how it started, have we seen these things elsewhere before? Making comparisons….You disentangle and dismantle all these [notions] by simply seeing that Obama is 40 years old, but Mubarak is 80, or when you compare between news in digital media and the forged ones in the government run media
Seeing conflicts as opportunities	discourse is exchanged and becomes varied, which causes tension, this ideological tension is very beneficial from my point of view, and it transforms into action in the real world
Opening to alternative points of views	I learned to say my opinion, or to consider the opposing opinion. To be humble enough to understand the opposing opinion. I learned to come in terms with how I see myself
Analyzing information	we were told that we have a peculiar culture, or Egyptians are like that, what is peculiar about wanting a clean intravenous injection or wanting sidewalks?
Assessing former assumptions	When I write something and someone comments on it with a question, it challenges my knowledge, and I start to think whether what I wrote is right or wrong, then I start to reassess it.
Developing/refining initial ideas	a reproduction of ideas occurs; next, each community of interest creates its discourse that is exchanged and becomes varied
Changing frames of references	Blogs are God's gift to humanity, most of the blog posts by activists including Wael Abbas, Amr Ezzat and Nawara Nigm shaped our minds, they started forming a mainstream and creating a strong impact –especially, when Wael shared videos of paid thugs who sexually assaulted female journalists, protesting during a constitution reform in 2005
Making cross-cultural comparisons	I started to think that I would have received a better education if the system wasn't corrupt. I started to see the gap between our quality of living and the one of some foreign friends that I have. Differences in the relation between police and public, and between governments and citizens started floating to the surface. I saw different ideologies and political views that never existed during the past regime
Contributing to the public sphere	We were able to liberate the public sphere with our bodies after we did that online (. . .)
Owning one's digital space	I learned some aspects concerning my own freedom. Meaning, this is

	my Facebook account, I can write what I want on my wall or post any picture. Nobody else has that right. If you don't like what I wrote then let it go, there is a space for comments, you have the right to post a comment, but if I don't like your comment, I have the right to remove it or block any person that I don't like. Facebook gives me this opportunity
Revealing one's personality	In the past, the only thing that I was able to choose, reflective of my personality, is a sticker on a school book
Shouting out ideas	When I write, I organize my ideas and I feel that I can express and shout them out
Creating a digital diary	I cannot protest in the street anymore because of the new restrictive protest law, so if I feel entirely oppressed and unable to talk; with time, I will start losing the meaning of things
Representing oneself freely	I can write what I want on my wall… I feel shy when dealing socially with people, but when I am alone with the keyboard, it is something different. If I meet someone, I can never talk tough to him, but if I see him online, I can rip him apart
Connecting to the outside world	I cannot think of deactivating my Facebook account. It means that there will be important things that I will not be able to know about… I will lose my contact with the outside world
Gaining awareness	When I talk to people who don't use social media I feel that they are living in a different country or a different world. Their source of information is different and the goal behind the information, which they receive, is different. Traditional media is unidirectional, shamelessly managed, and purposeful
Taking charge of your own learning	I learned to be aware and be careful of what I post, which can negatively or positively influence other people. I also learned to not consider Facebook as a statistical indicator of the community, to not get too involved in details that sponsor wasting my efforts and my endurance capacities, and surely, not to assume that other people are honest or post the truth
Developing oneself	After few months from the revolution, we tried to use social media to develop ourselves and learn from our mistakes and avoid repeating them
Recognizing their rights as a learner within educational systems	as a member of the student association I'm able to organize strikes demanding educational and social reforms

Feeling safe	Why would I go out to distribute flyers in the university if I can easily post an event on Facebook? The event will reach many more people and I will not put my safety in danger

Theme five - Codes and Representative Quotes	
Codes	Quotes
Questioning one's existence	I started questioning if I am really living in this country or is it just a place of birth. I started to think that I did not exist. I felt I didn't have a voice. I was just a Facebook account
False assumptions about the ruling system	I was watching the government-controlled media that used to portray the people in Tahrir Square in an extremely negative way, as if the protestors' goal is to destroy the country (…) I decided not to follow the media or allow it to control me anymore (…) I began to see the ugly face of the regime, the corruption, and the amount of money looted from the country
Misconceptions about religion	My religious perception has transformed. I went from memorizing the Quran and being religious to seeing religion as a tool used by dictators to oppress the public. I am the same person but now I can criticize using religion as a tool in social and political struggles
Lies fed by media	People are under the influence of a controlled media that keeps feeding them terrible stories and lies.
Seeking to understand one's rights in a global context	I started to think that I would have received a better education if the system wasn't corrupt. I started to see the gap between our quality of living and the one of some foreign friends that I have. Differences in the relation between police and public, and between governments and citizens started floating to the surface
Following insights into the essential meaning of life	Now there is a parallel view or a side of life that I haven't seen before. A side that is more refined, enlightened, and diversified.
Qualitative change	My ideas transformed and a qualitative change has occurred
Breaking stereotypes	I was able to break many stereotypes. During the time I spent in Tahrir Street and union meetings I sat with people at different points on the political spectrum, which required that I read about them and break many stereotypes that I had
Evolution	I started to attend seminars, read all articles, buy political books, or look for them online. I passed the MB stage and became an enlightened

	Islamist, which I also surpassed and became a revolutionary socialist, and now I call myself social democratic. This is the evolution; it is an incomplete evolution. I learn something new every day. There are no constants
Transforming former beliefs	I discovered that Egypt is not the Mother of the World as they used to teach us in schools and feed us similar ideas through their media
Transforming social relations	New networks of contacts were established and expanded to protect and share live information. I, personally, owe my life to such communities and I am still alive because of them
Appreciating gender diversity	When I filmed my documentary The *meaning of a civil state in 5 minutes,* all my cast were men, to the point that a female colleague accused me of being anti-feminist(…) I learned to respect women
Appreciating religious diversity	After the revolution, I didn't feel that I am Christian or minority. In Tahrir square, all people were the same
Appreciating societal diversity	For the first time, people from all walks of life were talking, bonding, and helping each other. I saw, for the first time, solidarity in all the actions
Believing in one's ability to change	The acquired knowledge here, you may name it, the knowledge for the ability to change, the ability to dream, the ability to achieve
Believing in one's ability to dream and protecting that dream	I also learned to dream. People are willing to give up their money, time, freedom, and life, they do that happily, because they have a dream. We have to protect this dream from dying
Understanding one's power to change the world	Change starts from within; it starts on the inside and works its way out, not vice versa
Applying new understandings in planning for the future	If I don't agree with a status, I have to rise, take an action, and try to change it with the best of my abilities. I will fail, I will try again, and I will learn from my mistakes, and try again. The most important thing is that I do not wait for a leader or a savior, nor do I feel sorry for myself
Discovering one's life purpose	I noticed that my words make a difference to younger students. I have many friends who are not involved in public labor but follow and think about what I write, specifically, when they tell me that they got into the Political Sciences program or became members in student associations because of me. All this makes me feel that I am making a difference
Gaining control over one's life	I learned that there is no matter of fact about anything in this world; anything can change at any time if we decide to change it. No one can silence a human being or prevents her from doing something that she

	wants. We should not wait for authorities to offer us a substitute, we should be proactive and provide solutions
Understanding people power	If you want to know the truth you have to connect to people and you have to connect to those who can make a change, the marginalized unprivileged people. If you know how these people think, you may be able to transform this country
Practicing one's right to voice opinions	I grew up not knowing how to express my opinion. Now, I let my voice be heard and I try to explain to others my views openly and unreservedly without any fear
Taking ownership of one's learning	I discovered that I still have a long way to go to construct a mature perspective of the world, but I will continue to learn
Promoting minority rights	I will continue to use social media to spread civic ideas, to denounce and expose the injustices and to promote women's and minority rights.
Protecting the Revolution and keeping its ideas in the collective mind	I will use social media to protect what's left of my small community and "I will use it to keep the idea of the Revolution in the collective mind
Denouncing and exposing injustice	I will continue doing what I used to do since 2008, to denounce and expose the injustices and transfer real stories to people
Transferring real stories to people	I will continue doing what I used to do since 2008, to denounce and expose the injustices and transfer real stories to people
Serving one's community	We created a campaign, *Alive but not Living*, to help people claim their rights. We would mobilize and organize marches for them, film them and broadcast the movie on TV, and we would organize press conferences in ghettos and stream the film on YouTube.
Teaching people about their rights	We created an initiative for the interactive theatre, *My Hand on your Shoulder,* to raise awareness through Art, transmit the ideas and spirit of the revolution to the different ghettos, and to convey their messages to poor people in a simple way that is different than the traditional methods of outreach.

Theme Six - Codes and Representative Quotes	
Codes	Quotes
Taking a stand against injustice	A political activist is someone who cares about absolute justice, he is against injustice, discrimination, and classification
Raising people awareness about their rights	I will remind them of their rights that they don't have
Having a different perspective than the mainstream	He has a unique prospective. He can see further than others
Self-sacrifice for the common good	He does something that he feels no one else would do because everyone else is waiting for the activist to do it, they are almost sacrificing him, and this is part of being an activist
Interactive	The meaning of being human is interaction.
Proactive	The idea of being proactive
Change political, economic, and social status	Change the absurd political, economic, and social status
Contributing to the community	You are a part of this society and you have responsibilities towards it. You are supposed to a make a meaningful addition that can last
Serving others	An activist is positive human being aiming to achieve certain goals, not for personal gains, but for the greater good
Focusing on the common good rather than one's own benefits	An activist (…) aiming to achieve certain goals, not for personal gains, but for the greater good. These goals overshadow his personal goals
A way of living	To me, revolution is not demonstrations; it is a way of living
Looking for alternative resources	I want to achieve self-sufficiency (…) I don't want the ruling system to tell me one day that I cannot buy my food, I would like to make the community stronger so that no dictator would be able to do anything, it is a very big [idea] and difficult [to achieve] but it makes life more bearable
Defending people rights	He protects people rights. He is someone that we turn to when we are desperate.